

# **E-D COAT, INC. TIME-CRITICAL REMOVAL ACTION REPORT**

**E-D COAT, INC. REMOVAL ACTION  
OAKLAND, ALAMEDA COUNTY, CALIFORNIA**



**Prepared for:  
U.S. Environmental Protection Agency  
Region 9, Emergency Response Section**

**EPA Contract No. 68HE0919D0002  
Document Control No. 0102-08-AATS  
Subtask No. 68HE0921F0018-00**

**March 2022**

Prepared by:




**Weston Solutions, Inc.  
2300 Clayton Road, Suite 900  
Concord, CA 94520**

# TIME-CRITICAL REMOVAL ACTION REPORT

## E-D COAT, INC. REMOVAL ACTION OAKLAND, ALAMEDA COUNTY, CALIFORNIA

EPA Contract No.: 68HE0919D0002  
Document Control No.: 0102-08-AATS  
Subtask No. 68HE0921F0018-00

Prepared by:  Date: 3/11/2022  
Kazami Brockman, START Engineering Associate  
Weston Solutions, Inc.

Reviewed by:  Date: 3/11/2022  
Rick Mehl, START Response Coordinator  
Weston Solutions, Inc.

---

## TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1. INTRODUCTION.....</b>	<b>1-1</b>
<b>2. SITE LOCATION AND DESCRIPTION.....</b>	<b>2-1</b>
2.1 SITE LOCATION.....	2-1
2.2 SITE DESCRIPTION .....	2-1
2.2.1 Site Areas .....	2-1
2.3 SITE HISTORY.....	2-2
2.4 PREVIOUS INVESTIGATIONS AND REMOVAL ACTIONS .....	2-3
<b>3. HEALTH AND SAFETY .....</b>	<b>3-1</b>
3.1 COVID-19 PROTOCOLS .....	3-1
3.2 REMOVAL ACTION WORKER PROTECTION .....	3-1
<b>4. REMOVAL ASSESSMENT ACTIVITIES .....</b>	<b>4-1</b>
4.1 WASTE QUANTITY SURVEY .....	4-1
4.2 ACM SAMPLING .....	4-1
4.3 WASTE CHARACTERIZATION SAMPLING.....	4-1
<b>5. REMOVAL ASSESSMENT RESULTS .....</b>	<b>5-1</b>
5.1 WASTE QUANTITY SURVEY RESULTS.....	5-1
5.1.1 A-B Building.....	5-1
5.1.2 C-G Building.....	5-1
5.1.3 D-E Building.....	5-2
5.1.4 F Yard .....	5-3
5.2 ACM SAMPLING RESULTS.....	5-3
5.3 WASTE CHARACTERIZATION RESULTS .....	5-3
5.3.1 Corrosivity Results.....	5-3
5.3.2 Metals Results .....	5-4
5.3.3 Cyanide Results .....	5-6

---

## TABLE OF CONTENTS (CONTINUED)

---

<b>6. REMOVAL ACTION ACTIVITIES.....</b>	<b>6-1</b>
6.1 SITE STAGING AND SETUP.....	6-2
6.2 ADDITIONAL WASTE SAMPLING AND ANALYSIS .....	6-2
6.3 FIELD SCREENING ACTIVITIES.....	6-3
6.3.1 XRF Field Screening.....	6-3
6.3.2 Cyanide Screening .....	6-4
6.3.3 Compatibility Testing .....	6-4
6.3.4 Field Hazard Categorization .....	6-4
6.4 REMOVAL OF PLATING TANKS .....	6-5
6.4.1 LIQUID WASTE PUMPING .....	6-5
6.4.2 SOLID HAZARDOUS WASTE MANAGEMENT .....	6-5
6.4.3 TANK DISMANTLING AND DISPOSAL .....	6-6
6.5 ACM REMOVAL.....	6-7
6.6 PIPE REMOVAL.....	6-7
6.7 DISPOSAL OF SMALL CONTAINERS .....	6-8
6.8 FLOOR CLEANING .....	6-8
6.9 WASTE DISPOSAL.....	6-8
6.10 REMOVAL ACTION AIR MONITORING AND SAMPLING .....	6-10
6.10.1 Particulate Air Monitoring.....	6-10
6.10.2 Particulate Air Sampling.....	6-10
6.10.3 Multigas Air Monitoring.....	6-11
<b>7. CONCLUSION.....</b>	<b>7-1</b>
<b>8. REFERENCES .....</b>	<b>8-1</b>

---

## LIST OF FIGURES

---

- Figure 1 Site Location Map
- Figure 2 Site Layout Map
- Figure 3 A-B Building Layout
- Figure 4 C-G Building Layout
- Figure 5 D-E Building Layout
- Figure 6 F Yard Layout

---

## LIST OF TABLES

---

- Table 1 Waste Quantity Survey
- Table 2 Asbestos Sampling Results
- Table 3 Waste Characterization Sampling Results
- Table 4 Total Metals Sampling Results
- Table 5 Liquid Hazardous and Non-Hazardous Waste Disposal Summary
- Table 6 Solid Hazardous Waste Disposal Summary
- Table 7 RCRA Debris Disposal Summary
- Table 8 ACM Disposal Summary
- Table 9 Lab Pack Disposal Summary
- Table 10 Particulate Monitoring Results in Air
- Table 11 Particulate Air Sampling Results

---

## LIST OF APPENDICES

---

Appendix A	Removal Assessment Photograph Log
Appendix B	Removal Action Photograph Log
Appendix C	Waste Manifests
Appendix D	Laboratory Data Packages and Validation Reports

---

## LIST OF ABBREVIATIONS AND ACRONYMS

---

≤	less than or equal to
%	percent
µg/m <sup>3</sup>	microgram per cubic meter
µm	micrometer
ACDEH	Alameda County Department of Environmental Health
ACM	asbestos containing material
AHERA	Federal Asbestos Hazard Emergency Response Act
BART	Bay Area Rapid Transit
CAM 17	California Administrative Manual 17 metals
CCR	California Code of Regulations
CFR	Code of Federal Regulation
CO	carbon monoxide
COVID-19	coronavirus disease 2019; illness caused by the virus SARS-CoV-2
CY	cubic yard
DTSC	Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
ERQASP	Emergency Response Quality Assurance Sampling Plan
ERRS	Emergency and Rapid Response Services
ERS	Emergency Response Section
FOSC	Federal On-Scene Coordinator
HASP	Health and Safety Plan
HAZCAT	HAZCAT® hazard categorization system
J	Indicates that the laboratory analytical result is an approximate value
LBP	lead-based paint
LEL	lower explosive limit
MCE	mixed cellulose ester
mg/l	milligrams per liter
mg/kg	milligrams per kilogram
mg/m <sup>3</sup>	milligram per cubic meter
mm	millimeter
N/A	not applicable
ND	none detected
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
O <sub>2</sub>	oxygen
OSHA	Occupational Safety and Health Administration
Pangea	Pangea Environmental Services, Inc. PEL      permissible exposure limit

---

## LIST OF ABBREVIATIONS AND ACRONYMS (CONTINUED)

---

PID	photoionizing detector
pH	logarithm of hydrogen ion concentration in solution
PLM	polarized light microscopy
PM	particulate matter
PPE	personal protective equipment
PVC	polyvinyl chloride
QASP	Quality Assurance Sampling Plan
RCRA	Resource Conservation and Recovery Act
REL	recommended exposure limit
RL	reporting limit
SAP	Sampling and Analysis Plan
SOP	Standard Operating Procedure
SRM	standard reference material
SSDMP	Sire-Specific Data Management Plan
START	Superfund Technical Assessment and Response Team
STLC	Soluble Toxicity Limit Concentration
TCLP	Toxicity Characteristic Leaching Procedure
TCRA	Time-Critical Removal Action
TSI	TSI Incorporated
TWA	time-weighted average
VOC	volatile organic compound
WESTON®	Weston Solutions, Inc.
WS	waste stream
XRF	X-ray fluorescence



## EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) Region 9 Federal On-Scene Coordinators (FOSCs) tasked Weston Solutions, Inc.'s (WESTON®) Superfund Technical Assessment and Response Team (START) to support the time-critical removal action (TCRA) at the E-D Coat, Inc. site located at 715 4<sup>th</sup> Street, Oakland, Alameda County, California (hereinafter referred to as the Site). START provided removal action support to EPA under EPA Region 9 START V Contract number 68HE0919D0002, Subtask number 68HE0921F0018-00.

The Site consists of three warehouse-type buildings and an outdoor waste processing area in Oakland, Alameda County, California. A Site Location Map is provided as Figure 1. E-D Coat conducted metal plating operations at the Site for more than 75 years. The facility has been inactive since 2012. The A-B Building is located to the north of 4<sup>th</sup> Street and includes plating line A (A Line) and plating line B (B Line). The D-E Building is to the south of 4<sup>th</sup> Street, across from the A-B Building and includes plating line E (E Line), plating line D (D Line), and a dryer room with many small containers of liquid and solid hazardous waste. The C-G Building is located directly to the west of the D-E Building and includes plating line C (C Line) and plating line G (G Line). The F Yard is located to the south of the D-E Building and north of 3<sup>rd</sup> Street and contains the waste processing line (F Line). Each area included tanks, sumps, and miscellaneous small containers. F Line includes holding tanks, filtration tanks, piping, and chemical storage tanks associated with the waste processing activities at the Site. A set of three sumps located in the northwest part of F Yard collect liquid from other Site sumps as well as from surface water collection sumps in F Yard. A Site layout map is provided as Figure 2, and layouts of each Site area are included in Figures 3 through 6.

Between August 3, 2021 and August 5, 2021, EPA and START and Emergency and Rapid Response Services (ERRS) contractors completed a removal assessment at the Site, which included sampling and pH field testing of liquid and solid materials and sampling of potential asbestos-containing material (ACM) at the Site. A survey was conducted to assess the quantity of waste present in tanks, sumps, and containers at the Site.

The Site contained corrosive, toxic chemicals in deteriorating tanks, drums, and other containers, presenting the potential for a release of chemicals on- and off-site. ACM was detected in two areas of the Site (pipe insulation associated with boilers in F Yard and the A-B Building). A total of 162 tanks associated with plating and wastewater processing activities were documented at the Site. More than 60 drums containing liquid and solid materials were found. Thirteen sumps and 196 small containers containing solid and liquid materials were found at the Site. An estimate of 55,700 gallons of liquid material and 39,500 gallons of sludge and solid material was estimated based on the height of solid and liquid material within tanks and other containers at the Site. Tables 1 through 4 present summaries of the removal assessment waste quantity survey and sampling results.

EPA determined that the deteriorating condition of tanks and other containers at the Site posed a risk of a potential chemical reaction, fire, or on- or off-Site release of hazardous chemicals at the Site. Chemicals of concern (COCs) at the Site included corrosive liquids and solids, potentially cyanide-containing waste, ACM, and heavy metals.

Based on the results of the removal assessment, a time-critical removal action (TCRA) was initiated. Between August 29, 2021 and November 3, 2021, EPA and START and ERRS contractors completed a removal action with the objective of mitigating the risk of potential on- or off-Site releases of hazardous chemicals from the Site. Removal actions included removing and disposing of contaminated tanks, pipes, drums, containers, and liquid and solid hazardous waste associated with the former plating operations at the Site. ACM was removed, bagged, and disposed of by a certified ACM contractor. Solid hazardous waste, liquid hazardous waste, liquid non-hazardous waste, and dismantled tanks were transported to US Ecology Nevada, Inc., in Beatty, Nevada for disposal. Potential contamination of subsurface areas of the Site (soil and groundwater) was not assessed during this removal.

The approach to address each tank was as follows: Liquid waste was first removed from each tank and pumped into tanker trucks, vacuum boxes, or polyethylene totes for disposal. After solidifying any liquid remaining in the tank with sorbent, the solid waste was removed and placed in one-cubic-yard boxes for disposal. The empty tanks were transported to a tank cutting area, where they were dismantled by blowtorch, plasma cutter, or hydraulic shears. Dismantled tanks, tank liners, and other solid scrap were loaded into bins for disposal as Resource Conservation and Recovery Act (RCRA)-hazardous debris.

Pipes containing hazardous liquid waste were carefully emptied into containers for characterization, bulking, and disposal. Small containers present throughout the Site were gathered in the northwest area of the D-E Building for inventory, hazard categorization, and segregation of incompatible materials. The small containers were then packed into lab pack groups or bulked into larger containers for disposal. Lab packing refers to the packing of sorbent and several containers containing wastes of the same hazard category into a single, larger container for disposal. Bulking refers to the mixing of similar wastes for disposal. After all waste had been removed, the floors were cleaned in each area.

Work zone air sampling and particulate air monitoring were conducted in indoor and outdoor areas of the Site during all dust generating activities. The air samples were analyzed for California Administrative Manual 17 (CAM 17) metals and hexavalent chromium contamination. Multi-gas air monitoring equipment was used to monitor work zones of interest for hydrogen cyanide and carbon monoxide concentrations in air.

Beginning on the night of October 21, 2021, and continuing to October 24, 2021, a series of large rain events caused all Site sumps, previously pumped out, to refill to maximum capacity. Pooling of surface water was observed on floors of each Site area. All tanks had been emptied and dismantled at that time, and waste remaining in disposal containers staged at the Site were not affected. The sumps and pooled water were pumped out, but due to continuing rain events, an estimated 5 feet of water remained in F Yard sumps 2 and 3 on the final day of the removal action on November 3, 2021.

# 1. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 9 Federal On-Scene Coordinators (FOSCs) Chris Reiner and Olivia Trombadore tasked Weston Solutions, Inc.'s (WESTON®) Superfund Technical Assessment and Response Team (START) to support removal assessment and time-critical removal action (TCRA) activities at the E-D Coat, Inc. Site located in Oakland, Alameda County, California (hereinafter referred to as the Site). START provided technical support to EPA under EPA Region 9 START V Contract number 68HE0919D0002, Subtask number 68HE0921F0018-00. This report documents the removal assessment conducted from August 3, 2021 through August 5, 2021 and the removal action conducted from August 29, 2021 through November 3, 2021.

Between August 3, 2021 and August 5, 2021, EPA and START and Emergency and Rapid Response Services (ERRS) contractors completed a removal assessment at the Site. The removal assessment included laboratory analysis and pH field testing of liquid and solid samples, and analysis of potential asbestos containing materials (ACM) samples. A survey was conducted to assess the quantity of solid and liquid material present in tanks, sumps, and containers at the Site.

The deteriorating condition of tanks, drums, and other containers at the Site posed a risk of a potential chemical reaction, fire, or on- or off-Site release of hazardous chemicals into the environment. Chemicals of concern (COCs) at the Site included corrosive liquids and solids, asbestos, potentially cyanide-containing wastes, ACM, and heavy metals.

Between August 29, 2021 and November 3, 2021, EPA and START and ERRS contractors completed a removal action with the objective of mitigating the risk of potential releases of hazardous chemicals into the environment. Removal actions included removing and disposing of contaminated tanks, pipes, drums, containers, ACM, and liquid and solid materials associated with the former plating operations at the Site. Solid waste, liquid waste, and dismantled containers were transported to Beatty, Nevada for disposal. Potential contamination of subsurface areas of the Site (soil and groundwater) was not addressed in this removal.

Removal assessment and removal action activities were performed in accordance with the Site-Specific Removal Assessment and TCRA Quality Assurance Sampling Plan (QASP) for E-D Coat, Inc., dated July 27, 2021 (WESTON, 2021a), the Site-Specific Data Management Plan (WESTON, 2021b). A Site-Specific Consolidated Health and Safety Plan (HASP) was developed and was used to incorporate individual HASPs from EPA, START and ERRS contractors, and subcontractors.

## 2. SITE LOCATION AND DESCRIPTION

### 2.1 SITE LOCATION

The Site consists of three warehouse-type structures and an outdoor waste processing area in Oakland, Alameda County, California. A Site Location Map is provided as Figure 1. The main address associated with the Site is 715 4<sup>th</sup> Street, Oakland, CA. The geographic coordinates of the approximate center of the Site are latitude 37° 47' 59.2836" North and longitude 122° 16' 55.146" West. The Site is located between 3<sup>rd</sup> and 4<sup>th</sup> Streets, with an additional area on the north side of 4<sup>th</sup> Street. Elevation at the project Site is approximately 15 feet above mean sea level.

### 2.2 SITE DESCRIPTION

The Site is no longer active and includes four general areas where plating processes and waste treatment processes were formerly conducted at the Site. The general area is zoned as mixed commercial industrial use. The Site is bordered by residential properties, a brewery, and a church. The nearest water body is the Oakland Estuary, located approximately 0.26 mile south-southeast of the Site. The table below summarizes the information associated with the four Site areas.

Summary of Site Areas	
Site Areas	Associated Addresses/Parcel Numbers
A-B Building	716 4th Street/001 011501802
C-G Building	725 4th Street/001 011502800
D-E Building	715 4th Street/001 011502900
F Yard	718 3rd Street/001 011503500 714 3rd Street/001 011503400 No Associated Address/001 011503600

#### 2.2.1 Site Areas

The subsections below describe each area of the Site, and review the tanks, sumps, and other items present in each area. The term “sump” refers henceforth to tanks set into the ground with the purpose of collecting liquid from floor surfaces and from floor drains. The tanks in each area are identified according to their associated process line; e.g., tanks in D Line are numbered D1 through D16. A layout of each area is included in Figures 3 through 6 at the end of this report.

##### *A-B Building*

The A-B Building is located on the northern side of 4<sup>th</sup> Street and includes plating line A (A Line), plating line B (B Line), overhead piping, a three-part sump tank, a boiler, and assorted tanks. The floor is concrete, is in moderate condition, and includes a floor drainage system leading to the sumps. The area is accessed from an entrance on 4<sup>th</sup> Street. It is bounded to the north by a vacant area containing various vehicles and other items, and beyond by an elevated, heavy rail line associated with the Bay Area Rapid Transit (BART) system. The A-B Building is bounded to the

east by a warehouse, to the west by a residential home, and to the south by 4<sup>th</sup> Street. The A-B Building layout map is presented on Figure 3.

### *D-E Building*

The D-E Building is located directly across 4<sup>th</sup> Street from the A-B Building and includes plating line D (D Line), plating line E (E Line), overhead piping, two sumps, 55-gallon drums of liquid waste previously contained in D Line, and a dryer room with many small containers of liquid and solid chemicals associated with Site plating processes. The concrete floor is in poor condition, having been severely corroded in several areas likely due to previous spills of corrosive liquids. Shallow channels cut into the floor appeared to drain liquids from the floor south into F Yard. The D-E Building is bounded to the north by 4<sup>th</sup> Street, to the east by a residential property, to the south by F Yard, and to the west by the C-G Building. Roof leaks were evident in the D-E Building, and several tanks had been covered with tarps and plywood in an attempt to prevent rainwater from entering the tanks. The D-E Building layout map is presented on Figure 5.

### *C-G Building*

The C-G Building is located directly to the west of the D-E Building and includes plating line C (C Line), plating line G (G Line), a Baker tank, and a three-part sump tank. The floor is concrete and in good condition. The C-G Building is bounded to the north by 4<sup>th</sup> Street, to the east by D-E Building, and to the south and west by a church. An additional sump is located just outside the C-G Building door, on the southern side of 4<sup>th</sup> Street. This sump contains piping originating from the A-B Building and leading toward the C-G Building sumps. The C-G Building layout map is presented on Figure 4.

### *F Yard*

The F Yard is located to the south of the D-E Building and contains the waste processing line (F Line). F Line includes holding tanks, filtration tanks, piping, and chemical storage tanks associated with the waste processing activities at the Site. A set of three sumps located in the northwest part of F Yard collect liquid from other Site sumps as well as from surface water collection sumps in F Yard. Other F Yard features include settling tanks, filtration vessels, 55-gallon drums containing solid and liquid waste, holding tanks, chemical storage tanks, a boiler, a sludge press, and a filter media dryer. The ground surface is concrete and in poor condition. The F Yard is bounded to the north by the D-E Building, to the east by a brewery, to the south by 3<sup>rd</sup> Street, and to the west by a church. The F Yard layout map is presented on Figure 6.

## **2.3 SITE HISTORY**

E-D Coat, Inc. conducted metal plating operations at the Site for more than 75 years. The facility has been inactive since 2012, when the East Bay Municipal Utility District terminated E-D Coat Inc.'s wastewater discharge permit due to allegations that E-D Coat, Inc. was discharging water with heavy metals contamination to the sewer. EPA visited the Site on July 15, 2015, with the Alameda County Department of Environmental Health (ACDEH) and observed that plating line D (also known as the "old barrel line,") consisting of 16 tanks, was in especially bad condition. EPA issued E-D Coat, Inc. a notice requiring them to pump the solutions in the D Line tanks into competent containers. On May 13, 2016, with EPA oversight, E-D Coat Inc.'s contractor

transferred plating solutions from plating line D into polyethylene drums (EPA, 2016).

California Department of Toxic Substances Control (DTSC), ACDEH, the Alameda County District Attorney's Office, and other agencies carried out a search of the Site under a criminal search warrant on April 19, 2017, and found corrosive and toxic chemicals in deteriorating tanks, drums, and other containers at the Site, presenting the potential for a release of chemicals into the environment. DTSC issued a cleanup order requiring E-D Coat, Inc. to take steps to prevent the release of hazardous chemicals on- and off-site. DTSC oversaw a removal action targeting some of the high-risk chemicals at the Site, including cyanide waste in three sumps at the facility (DTSC, 2020).

## **2.4 PREVIOUS INVESTIGATIONS AND REMOVAL ACTIONS**

Pangea Environmental Services, Inc. (Pangea) was hired by E-D Coat, Inc. in 2016 to transfer liquids previously contained in D Line into new 55-gallon polyethylene drums. The drums were staged in a secondary containment in the D-E Building. Pangea also conducted an inventory of the tanks and containers at the Site and documented estimated waste volumes and pH. Pangea also developed a tank/container numbering system, which was retained for the EPA removal assessment and removal action. The figures produced by Pangea were used to produce Figures 3 through 6, which detail the locations of tanks and containers on the Site. DTSC hired a contractor to conduct a partial removal and disposal of waste in 2017. The DTSC removal activities included the removal of cyanide waste from three sumps at the property (DTSC, 2020).

### **3. HEALTH AND SAFETY**

A consolidated HASP was prepared and documented as *EPA, Region 9 Emergency Response, Planning, and Preparedness Branch, Consolidated Site-Specific Health & Safety Plan, E-D Coat, Inc.*, September 2021 (EPA, 2021).

The HASP was used to incorporate individual HASPs from EPA, the START and ERRS contractors, and subcontractors. The HASP was prepared to conform with 29 Code of Federal Regulations (CFR) 1910.120 by summarizing work hazards, appropriate personal protective equipment (PPE), emergency procedures, and applicable standard operating procedures (SOPs). The consolidated HASP did not supersede any individual entity safety programs or site-specific HASPs as mandated by 29 CFR 1910.120(b). The consolidated HASP provided a means for evaluating and minimizing near misses, accidents, injuries, and/or illnesses that may have occurred while performing site-specific removal assessment and removal action activities.

#### **3.1 COVID-19 PROTOCOLS**

Coronavirus disease 2019 (COVID-19) prevention protocols were used to protect the health and safety of workers and the communities being served. COVID-19 protocols were established as a priority and included twice-weekly COVID-19 testing, social distancing requirements, and mandatory use of cloth or KN95/N95 face coverings. COVID-19 protocols were performed in accordance with EPA requirements during the removal assessment and removal action.

#### **3.2 REMOVAL ACTION WORKER PROTECTION**

The ERRS contractor conducted personal particulate air sampling for equipment operators and laborers during removal activities for 3 days in each work area. Particulate air samples were collected from the breathing zone of the personnel conducting removal actions. The sample filters were collected daily, were recorded, and were properly documented before shipping them to an accredited laboratory for analysis. The samples were analyzed by National Institute for Occupational Safety and Health (NIOSH) method 7300 for metals, including cadmium chromium, copper, lead, and zinc. The personal air sampling and analysis results may be obtained from the ERRS contractor.

START provided air monitoring and air sampling support for work zone particulate air monitoring, multi-gas air monitoring, and particulate air sampling throughout the response. All work zone personnel were required to wear full-face respiratory protection and level C personal protective equipment (PPE) during all dust generating and waste management activities. Work zone air monitoring consisted of placing TSI Incorporated (TSI®) DustTrak aerosol monitors (DustTrak) in work areas approximately 5 feet above the ground surface. Air monitoring stations were positioned in all dust generating work areas during the removal action. A nuisance dust action level of 15 mg/m<sup>3</sup> was established for the work zones. Water was applied during outdoor dust generating activities as the primary engineering control.

Air samples were collected at each DustTrak air monitoring station to confirm that metal particulate COC were not exceeding worker safety levels. Particulate air samples were analyzed by NIOSH methods 7303 and 7605 for metals, including cadmium, chromium, copper, hexavalent

chromium, lead, and zinc. Particulate air sampling results were compared to the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) for each analyte (OSHA, 2017). The multi-gas air monitors included sensors for hydrogen cyanide, hydrogen sulfide, volatile organic compounds (VOCs), carbon monoxide, and lower explosive limit (LEL).



## **4. REMOVAL ASSESSMENT ACTIVITIES**

Between August 3, 2021 and August 5, 2021, EPA and the START and ERRS contractors mobilized to the Site for a removal assessment. The assessment included solid and liquid waste sampling, sampling of potential ACM, and a survey of the quantity of solid and liquid waste present in tanks, sumps, and containers at the Site. The following sections detail removal assessment activities. Photographic documentation for the removal assessment is provided as **Appendix A**.

### **4.1 WASTE QUANTITY SURVEY**

The waste quantity survey was conducted by EPA, START, and ERRS and involved documentation of tank and container sizes, solid waste volume, liquid waste volume, container labelling and numbering, field pH testing, and other visual information such as the appearance of the waste and the condition of the containers. The tank/container numbering scheme from the previous Pangea investigation was retained for the removal assessment and subsequent removal. Layout maps of each area of the Site are shown in Figures 3 through 6.

Tank dimensions were measured, and the total tank capacity was calculated. Solid and liquid waste volumes were calculated based on the tank dimensions and the depth of each waste layer in the tank. pH was measured using field test strips. Chemical composition information provided on container labelling was documented in field logbooks and photographs. Due to time and sampling supply constraints, drums and other small containers were not individually assessed, sampled, or documented during the removal assessment; however, general information on the number of small containers was recorded.

### **4.2 ACM SAMPLING**

Building materials, insulation, and piping were visually inspected for asbestos. Twelve bulk samples of suspect ACM were collected and analyzed for 20 analyses on a layer-by-layer basis using the polarized light microscopy (PLM) method. A sample approximately 2 to 4 square inches in size was collected from each area of suspected ACM. Each sample was placed in a resealable plastic bag and labeled. Sample collection locations were documented in field logbooks and in photographs.

### **4.3 WASTE CHARACTERIZATION SAMPLING**

Solid and liquid waste grab samples were collected by START, EPA, and ERRS from 51 tank and containers of interest. Where both solid and liquid waste layers were present, separate representative samples were collected of each matrix, for 54 samples. Samples were placed in glass sample containers and chilled to 4 degrees Celsius (°C) by placing on ice in an insulated cooler before delivering to the laboratory. Samples were analyzed for California Administrative Manual 17 (CAM 17) metals, Toxicity Characteristic Leaching Procedure (TCLP) metals, and Soluble Threshold Limit Concentration (STLC) metals. Containers were evaluated for possible cyanide contamination based on the previous usage of the containers and plating lines, as well as the pH of the material. Samples with high pH, collected from areas of the Site with historical cyanide usage, were analyzed for total cyanide and amenable cyanide. Tank E32 was labelled as

“0.3% hydrofluoric acid.” Analytical laboratories were not able to analyze the sampled contents of tank E32 due to the health and safety concerns associated with hydrofluoric acid.

## **5. REMOVAL ASSESSMENT RESULTS**

### **5.1 WASTE QUANTITY SURVEY RESULTS**

A total of 162 tanks associated with plating and wastewater processing activities were documented at the Site. More than 60 drums containing liquid and solid material were found; additionally, many empty drums were found in the F Yard. Thirteen sumps were found at the Site. The total estimated volume of for disposal was 55,700 gallons of liquid and 39,500 gallons of sludges and solid materials. The waste quantity survey results are presented in Table 1. For the purposes of this inventory, tanks and containers labelled in Figures 3 through 6 with the process line letter (e.g., F15) are considered part of that process line (F Line). Smaller containers and other peripheral machinery and boilers are described under the “Additional Items” section.

#### **5.1.1 A-B Building**

##### *A Line*

The A plating line consisted of 20 tanks mounted on a metal rack running north to south along the western wall in the A-B Building. The total capacity of the A Line tanks was approximately 6,700 gallons. The assessment team estimated the total volume of waste in A Line as 800 gallons of liquid material and 1,400 gallons of sludge and solid material. The plating line included a sulfuric acid tank and a hydroxide tank containing a large amount of crystallized material. Cyanide had been used in past plating processes. Grated floor drains containing solid deposits ran along each side of the A Line rack. Insulated metal piping ran above A Line and connected to the A Line boiler located on the north side of A Line.

##### *B Line*

The B plating line consisted of 18 tanks mounted on a metal rack running north to south along the eastern wall in the A-B Building. The plating line included a sulfuric acid tank and a hydroxide tank containing a large amount of crystallized material. Grated floor drains containing solid material ran along each side of the B Line rack. Insulated metal piping ran above B Line and connected to the A Line boiler located on the north side of A Line.

##### *Additional Items*

Additional items that were located in the space between A and B lines included (arranged from north to south): a dryer tank with internal fins; a set of three sumps; an acid bin; a nitric acid tank; 55-gallon containers of filter powder; and several additional 55-gallon drums. Several containers and appliances not associated with the Site plating operations were located to the south of the A and B lines.

#### **5.1.2 C-G Building**

##### *C Line*

The C plating line consisted of 42 tanks placed within a metal frame on the west side of the C-G Building. C Line tanks were 6-feet deep, and an elevated walkway between the process lines

provided access to the tanks. The total capacity of the C Line tanks was approximately 71,000 gallons. The assessment team estimated the total volume of waste in C Line as 11,600 gallons of liquid material and 17,300 gallons of sludge and solid material. The plating line was reportedly used for chromium and zinc plating processes in the past. Cyanide had been used in past plating processes. A set of three sumps were located to the east of C Line and to the north of G Line.

#### *G Line*

The G plating line consisted of nine tanks in the southeast part of the C-G Building, directly south of the C Line sumps. The total capacity of the G Line tanks was approximately 5,100 gallons. There was no liquid remaining in the tanks, but there was an estimated 430 gallons of sludges and solid materials in G Line.

#### *Additional Items*

Assorted small containers and drums were located on containment pallets along the east side of C-G Building. An 8,000-gallon Baker tank was located to the north of G Line. A covered vault located between C-G Building and 4<sup>th</sup> Street contained solid materials and was likely part of the piping conveyance system from A-B Building sumps to C-G Building sumps. Pipes containing liquid material were present within C and G lines, as well as along the east side of C-G Building.

### **5.1.3 D-E Building**

#### *D Line*

The D plating line consisted of 16 tanks arranged in two north-to-south rows, located in the northwest section of the D-E Building. The total capacity of the D Line tanks was approximately 6,400 gallons. There was no liquid material remaining in D Line since the D Line liquids had been transferred into 55-gallon drums in 2016. The assessment team estimated the total volume of solid material in D Line as 86 gallons. A floor drain was dug into the concrete flooring from north to south between the two rows of tanks and led toward the E Line sump. D Line was the oldest plating line at the Site and was referred to as the “old barrel line.” Cyanide had been used in past plating processes.

#### *E Line*

The E plating line consisted of 45 tanks and two sumps. One sump is evident in Figure 5; the other was located beneath tank E13. The total capacity of the E Line tanks was approximately 32,800 gallons. The assessment team estimated the total volume of material in E Line as 6,300 gallons of liquid material and 7,300 gallons of sludge and solid material. The plating line was used for chromium and zinc plating processes in the past. Tank E32 was labelled as “0.3% hydrofluoric acid”, presenting a large health and safety hazard. Other notable tank labelling included hydrochloric acid, chloride zinc, chromic acid, and sodium hydroxide.

#### *Additional Items*

Largely unlabeled metal and polyvinyl chloride (PVC) piping containing water, wastewater, and acids were present above the tanks and throughout D-E Building. The northeast section of the

building contained approximately 180 small containers of solid and liquid material, as well as 22 55-gallon drums containing liquids that had been pumped out of D Line tanks in 2016. The small containers included four 1.5-gallon bottles of 50 percent hydrofluoric acid. Other small containers were present throughout the D-E Building.

#### **5.1.4 F Yard**

##### *F Line*

F Line consisted of 20 tanks and four sumps. The three sumps located in the northwest corner of the F Yard collected liquids and surface water from throughout the Site for treatment. The E Line sump and the C Line sumps appeared to connect to the F Line sumps. An additional sump on the east side of the F Yard collected surface water and runoff from the F Yard. The total capacity of the F Line tanks was approximately 65,800 gallons. The assessment team estimated the total volume of material in F Line as 35,900 gallons of liquid material and 12,000 gallons of sludge and solid material, including sludge.

##### *Additional Items*

F Yard also included an 8,000-gallon Adler tank, more than thirty 55-gallon drums containing solid and liquid materials, a dryer, a boiler, a sludge press, and an extensive piping system containing acids and industrial wastewater.

### **5.2 ACM SAMPLING RESULTS**

Twelve bulk samples of suspect ACM were collected and analyzed for a total of 20 analyses on a layer-by-layer basis using the PLM method. Asbestos was detected in pipe insulation above the A Line boiler, and in pipe insulation above the F Yard boiler. Table 2 presents a summary of the asbestos sampling results.

### **5.3 WASTE CHARACTERIZATION RESULTS**

A total of 54 samples were collected from the Site. The samples were analyzed for California Administrative Manual 17 (CAM 17) metals, total and amenable cyanide, Toxicity Characteristic Leaching Procedure (TCLP) metals, and Soluble Threshold Limit Concentration (STLC) metals. The samples were also analyzed in the field for pH. The TCLP, STLC, pH, and cyanide results were used to develop waste profiles required for the disposal of Site waste. The total metals results were used to confirm and corroborate the waste characterization results. Table 3 presents the waste characterization results, and Table 4 presents the total metals results.

#### **5.3.1 Corrosivity Results**

Solid and liquid materials were field tested for pH. Measured pH ranged from less than 1 to 12. The table below summarizes the corrosive materials found at the Site.

Summary of pH Results			
Tank Numbers (Corrosive)	pH Result	Tank Numbers (Corrosive)	pH Result
A4	1.0	C26	2.0
A12	2.0	CSump2	2.0
B4	1.0	E3	1.0
B5	1.0	E12	1.0
B9	1.0	E17	1.0
C5	2.0	E20C	1.0
C17	14.0	E32	1.0
C23	1.0	E34	2.0
C24	1.0	F17	1.0
Note: Results less than or equal to 2 or greater than or equal to 12.5 are considered corrosive.			

### 5.3.2 Metals Results

Samples of liquid and solid materials were analyzed for TCLP metals and STLC metals. TCLP results were compared to the RCRA threshold for hazardous waste, while the STLC results were compared to the standard for California hazardous waste (California Code of Regulations [CCR] sections 66261.20 to 66261.24)

#### *TCLP Results*

Cadmium, chromium, and lead exceeded the RCRA threshold for hazardous waste in samples collected from the Site. Cadmium results ranged from non-detect to 43 milligrams per liter (mg/l), exceeding the RCRA limit of 1 mg/l in 19 samples. Chromium results ranged from non-detect to 1,400 mg/l, exceeding the RCRA limit of 5 mg/l in 10 samples. Lead results ranged from non-detect to 380 mg/l, exceeding the RCRA limit of 5 mg/l in 5 samples. The table below summarizes the TCLP metals results.

Summary of TCLP Metals Results			
Sample Information	Cadmium	Chromium	Lead
Number of Samples	51	51	51
Number of Detections	48	14	4
Result Range (mg/l)	ND to 43	ND to 1,400	ND to 380
RCRA Limit (mg/l)	1	5	5
Number of Exceedances	19	10	5
Notes: mg/l = milligrams per liter ND = None detected above reporting limit RCRA = Resource Conservation and Recovery Act			

### *STLC Results*

Cadmium, chromium, copper, lead, nickel, and zinc exceeded the threshold for California hazardous wastes in samples collected from the Site and analyzed for STLC metals. Cadmium results ranged from non-detect to 37 mg/l, exceeding the STLC limit of 1 mg/l in 19 samples. Chromium results ranged from non-detect to 1,500 mg/l, exceeding the STLC limit of 5 mg/l in 12 samples. Copper results ranged from 0.0023 J to 3,200 mg/l, exceeding the STLC limit of 25 mg/l 12 samples. The letter J after the analytical result indicates that the value is an approximate value because it was below the reporting limit but above the method detection limit of the laboratory analysis. Lead results ranged from non-detect to 360 mg/l, exceeding the STLC limit of 5 mg/l in 7 samples. Nickel results ranged from non-detect to 480 mg/l, exceeding the STLC limit of 20 mg/l in 8 samples. Zinc results ranged from 0.12 to 120,000 mg/l, exceeding the STLC limit of 250 mg/l in 19 samples. The table below summarizes the STLC results.

Summary of STLC Metals Results						
Sample Information	Cadmium	Chromium	Copper	Lead	Nickel	Zinc
Number of Samples	53	53	53	53	53	53
Number of Detections	40	46	53	34	49	53
Result Range (mg/l)	ND to 37	ND to 1,500	0.0023 J to 3,200	ND to 360	ND to 480	0.12 to 120,000
STLC Limit (mg/l)	1	5	25	5	20	250
Number of Exceedances	19	12	12	7	8	19
Notes: mg/l = milligrams per liter ND = None detected above reporting limit STLC = Soluble Threshold Limit Concentration STLC Limit = threshold for California hazardous waste as outlined in California Code of Regulations Sections 66261.20 to 66261.24						

### *Total Metals Results*

The total metals results confirmed the TCLP and STLC waste characterization results. Cadmium, chromium, copper, lead, nickel, and zinc were detected in the highest quantities. The table below summarizes the total metals results.

Summary of Total Metals Results						
Sample Information	Cadmium	Chromium	Copper	Lead	Nickel	Zinc
Number of Samples	54	54	54	54	54	54
Number of Detections	47	54	54	37	51	54
Result Range (mg/l or mg/kg)	ND to 150	0.002 to 13,000	0.025 to 3,600	ND to 940	ND to 7,800	0.074 to 200,000
Notes: mg/kg = milligrams per kilogram for solid samples mg/l = milligrams per liter for liquid samples ND = None detected above reporting limit						

### **5.3.3 Cyanide Results**

Twenty-eight samples were analyzed for cyanide and four of those samples were additionally analyzed for amenable cyanide. The sampling results were compared to the land disposal restrictions outlined in the Code of Federal Regulations (CFR) Chapter 1, Subchapter 1, Part 268. Only one sample exceeded these cyanide disposal screening levels, collected from a grated floor drain in the A-B Building, directly to the east of tank A4.



## 6. REMOVAL ACTION ACTIVITIES

Between August 29, 2021 and November 3, 2021, EPA and the START and ERRS contractors mobilized to the Site for the removal of solid and liquid materials from the Site. The objective of the removal action was to mitigate the risk of potential releases of hazardous chemicals into the environment by removing solid hazardous waste, liquid hazardous waste, and tanks associated with the former plating and industrial wastewater operations at the Site. With the exception of ACM, Site waste was transported to US Ecology Nevada, Inc., a RCRA-permitted landfill located in Beatty, Nevada, for disposal. All containers were labelled, manifested, and transported according to their waste profile for disposal at the facility.

A strategic approach was formulated by EPA for the removal of tanks, pipes, containers, and other items associated with the former electroplating activities at the Site. Initial efforts were focused on emptying, dismantling, and disposing of tanks in the F Yard and in the D-E Building to clear areas needed for tanker truck access, tank cutting activities, waste loading, and waste staging activities.

The approach to each tank was as follows: Liquids were first removed from each tank and pumped into tanker trucks, vacuum boxes, or polyethylene totes for disposal according to the waste profile. After solidifying any liquid remaining in the tank with sorbent, the solids were removed and placed in cubic-yard boxes for disposal. The empty tanks were transported to a tank cutting area, where they were dismantled. Dismantled tanks, tank liners, and other solid scrap were loaded into bins for disposal as RCRA-hazardous debris.

The blowtorch tank cutting activities were located in F Yard. Plasma cutters were procured to supplement the blow torches and improve the cutting rate. An excavator with hydraulic shears commenced tank dismantling activities in the C-G Building on September 22, 2021. The hydraulic shears drastically improved the tank dismantling rate and contributed to the completion of all tank dismantling activities in the C-G and A-B Buildings on October 9, 2021. After completing work in the C-G and A-B Buildings, the hydraulic shears were moved to F Yard. The final Site tanks were dismantled in F Yard on October 19, 2021. After clearing all tanks and other containers in each area, dust, sweepings, and other solid materials remaining on the floor were loaded into cubic-yard boxes, and the floor was cleaned.

While the emptying, dismantling, and disposing of tanks were critical to the removal action activities, other crucial tasks were on-going throughout the removal, including ACM removal, pipe removal, and field hazard categorization of unlabeled materials. Before commencing work in an area, any ACM was first removed, bagged, and disposed of by a certified ACM contractor. Pipes containing liquids were carefully emptied into containers for characterization, bulking and disposal. Electrical lines requiring removal or disturbance were inspected and disconnected by an electrician to ensure they were safe. Small containers present throughout the Site were gathered in the northwest area of the D-E Building for inventory, hazard categorization, and segregation of incompatible materials. The small containers were then grouped into lab pack groups for disposal, and liquid and solid materials were bulked into 55-gallon drums where possible. A man-lift was used to view the roof of the C-G Building and confirm that there were no storage tanks or containers of interest on top of the building. After all wastes had been removed, the floors were cleaned in each area.

Personal air sampling was conducted for 3 days for technicians and equipment operators in indoor and outdoor areas of the Site. The samples were analyzed for particulate metals and the results were reviewed with the workers and posted in a commonly accessible location. Work zone particulate air monitoring and particulate air sampling was conducted in active dust-generating areas of the Site throughout the removal action. Multi-gas air monitoring equipment was used to monitor work zones of interest for hydrogen cyanide and carbon monoxide concentrations in air.

Beginning on the night of October 21, 2021, and continuing to October 24, 2021, series of large rain events caused all Site sumps, previously pumped out, to refill to maximum capacity. Six inches of precipitation was measured in the vicinity of the Site for the October 24, 2021, rain event. Water infiltrated into each building at the Site, most severely in the D-E Building. Water pooled in the C-G Building, the D-E Building, and in F Yard. All tanks had been emptied and dismantled at that time, and the waste staged at the Site awaiting transport and disposal was not affected. Three additional tanker trucks were used to re-pump liquid from the sumps. Due to continuing rain events, an estimated 5 feet of water remained in F Yard sumps 2 and 3 on the final day of the removal action on November 3, 2021.

The following sections detail the EPA removal action activities summarized above. Photographic documentation of the removal action is provided as Appendix B.

## **6.1 SITE STAGING AND SETUP**

Two trailers were staged along 3<sup>rd</sup> Street to the south of F Yard to serve as office space for EPA, START, and ERRS operations. The blowtorch and plasma cutter tank cutting area was located in F Yard, and the hydraulic shears were located in C-G Building. Heavy equipment was staged overnight at the Site, and all doors and gates were locked. A security guard was present during removal activities, and an overnight security service provided 24-hour security for the Site. ERRS work crew included the ERRS Response Manager, a foreman, and up to seven additional technicians and equipment operators. Heavy equipment at the Site included a man-lift, skid-steer loader, two excavators, and hydraulic shears. As operations continued, waste was staged at the Site in cubic-yard boxes, totes, and roll-off bins to await transport.

## **6.2 ADDITIONAL WASTE SAMPLING AND ANALYSIS**

Additional sampling and analysis were conducted during the early stages of the removal action to fill data gaps in the removal assessment results.

Two samples analyzed for total cyanides during the removal assessment were additionally analyzed for amenable cyanide. The samples did not exceed land disposal restrictions for total and amenable cyanide.

Eight additional asbestos samples were collected and analyzed by polarized light microscopy (PLM) to better delineate the ACM found in the A-B Building and in F Yard during the removal assessment sampling. Four of the eight samples were determined to be ACM, and the sampling results were forwarded to the certified asbestos contractor to aid in the removal of ACM.

One sample of the sludge material in F Yard sump 2 was collected and analyzed for TCLP metals, STLC metals, total cyanide, and amenable cyanide. Cadmium, chromium, and zinc exceeded the

STLC threshold for California hazardous waste. Total and amenable cyanide did not exceed the land disposal restriction screening level.

After field hazard categorization confirmed that the liquid material in tank E32 was not hydrofluoric acid, a sample was collected and analyzed for total metals, TCLP metals, and STLC metals. These results are included in Table 2, Table 3, and Table 4.

### **6.3 FIELD SCREENING ACTIVITIES**

Field screening activities included the use of a handheld X-ray fluorescence (XRF) field analyzer for solid materials and painted surfaces, compatibility testing of liquid hazardous wastes, screening for cyanide, and hazard categorization testing, including oxidizer testing, pH testing, and flammability testing.

#### **6.3.1 XRF Field Screening**

A handheld XRF analyzer was used to gather screening data on the heavy metals content of paints and solid wastes on Site. Samples of materials of interest were collected, bagged, and then analyzed by the XRF analyzer.

To determine whether the XRF instrument was within resolution and stability tolerances, an energy calibration check was run with a calibration standard at the beginning of each day as the first XRF analysis. To check the accuracy of the instrument and to assess the stability and consistency of analyses for the analytes of interest (lead, chromium, cadmium, zinc), standard reference material (SRM) samples (National Institute of Standards and Technology [NIST] 2710a and NIST 2711a) were analyzed each day the XRF unit was used. The measured values for each SRM sample run during field XRF analysis for the project were within  $\pm 20\%$  standard deviation of the true value and were considered acceptable.

A pre-prepared “clean” silica sand sample served as an analysis blank sample. An analysis blank sample was used to verify that no contamination existed on the probe window during XRF analysis.

The XRF analyzer was used for the following tasks at the Site:

- Screen for lead-based paint (LBP) and lead-based liners on tanks in each area of the Site. Lead-based liners were identified on tanks F12A and E32. Likely LBP was identified on tank F13 and on the metal frame of C Line. The metal frame in C Line was not removed.
- Screen the discolored floor in the southwest portion of E Line, near E32 for heavy metals contamination. The discolored floor was confirmed to contain elevated concentrations of metals, including zinc, chromium, and copper.
- Differentiate between zinc and cadmium anode balls. Anode balls were collected from throughout the Site and placed in 5-gallon buckets for disposal. Sixteen 5-gallon buckets of anode balls were confirmed to contain a mix of used zinc and cadmium balls. Two additional 5-gallon buckets of unused anode balls were confirmed to contain zinc.

### 6.3.2 Cyanide Screening

A field test for cyanide was used to screen for cyanide in solid and liquid samples. A small amount of an unknown sample was placed in a glass sample jar. The lid of the sample jar was modified by drilling two 1/8-inch-diameter holes through the plastic. The lid was placed on the jar, and a hydrochloric acid dropper was used to introduce acid to the sample through one of the holes. Simultaneously, a MultiRAE Pro multi-gas air monitor equipped with a hydrogen cyanide sensor was used to monitor the air in the jar through the other hole. A Draeger gas detection tube was used to duplicate the MultiRAE Pro results. The test was used to simulate “worst case” health and safety field conditions by introducing a strong acid to the sample in an enclosed space. Upon contact with the acid, cyanide compounds present in the sample are released into the air in the form of hydrogen cyanide. After concluding the screening test, the sample’s pH was tested to ascertain that acidic conditions had been successfully induced in the sample.

The field test was used to produce screening data for the health and safety of workers, e.g., before pumping acid liquids, solid material in drains and on the floor around the acid tank were screened for cyanide using the above method. Additionally, the screening method was used to determine if laboratory analysis of the sample was necessary for waste disposal.

### 6.3.3 Compatibility Testing

Small-batch mixing in 5-gallon buckets was used to assess the compatibility of acidic, alkaline, and/or oxidizing liquids before bulking of the waste. The small-batch mixing was formulated to mirror the planned bulking process, i.e., the liquids were added in the same order as the planned bulking process, and the ratio of the volumes was representative of the planned process. A combined pH and temperature probe was calibrated and used to monitor the mixing process. The mixing was visually assessed for signs of chemical reactions, including temperature changes and production of gases. No issues were encountered during compatibility testing.

### 6.3.4 Field Hazard Categorization

Field hazard categorization was used to determine the hazard classes and disposal needs for the small containers present at the Site. The procedures were performed according to the HAZCAT<sup>®</sup> hazard categorization system, created by HazTech Systems, Inc. and using reagents included in the HAZCAT<sup>®</sup> kit. The HAZCAT<sup>®</sup> methods used during the removal included the following: corrosivity test, oxidizer test, peroxide test, flammability/combustibility test, and fluoride test. Dan Keenan, co-author of the HAZCAT<sup>®</sup> manual and Oakland Fire Department hazmat responder, briefly visited the Site during the removal to assist and lend his expertise to the hazard categorization activities.

The fluoride test was used on two occasions during the response to check for the presence of hydrofluoric acid. Both materials were negative for the HAZCAT fluoride test. Tank E32 had been labeled by the facility as 0.3% hydrofluoric acid but the fluoride test was negative, indicating that it did not contain hydrofluoric acid. In C-G Building, a rusted, punctured metal drum labeled “anhydrous HF” was found on a containment pallet. The label was old and almost illegible. The acidic liquid contained in a thin plastic liner inside the punctured drum tested negative for fluoride.

## 6.4 REMOVAL OF PLATING TANKS

### 6.4.1 LIQUID WASTE PUMPING

Liquid hazardous and non-hazardous wastes were removed for transportation and disposal according to their waste profiles. Liquids removed from Site tanks included inorganic acidic and alkaline liquids, RCRA-hazardous wastewater, RCRA-non-hazardous wastewater, chromic acid solution, sulfuric acid solution, and oxidizing acid solution.

Liquid wastes were pumped from tanks, sumps, and select 55-gallon drums into tanker trucks for transportation and disposal at US Ecology Nevada. Vacuum suction was used to remove liquids from tanks and other containers. When higher vacuum pressure was required to remove sludges and liquids with higher particulate content, vacuum boxes connected to Supersucker® industrial vacuum trucks were used. Corrosive liquids were pumped into specialized tanker trucks with pumping exhaust filters, ensuring safe pumping, transport, and disposal of acidic and alkaline liquids. The weight of the liquid removed from the Site by tanker trucks and vacuum boxes totaled 330 tons. The liquid hazardous and non-hazardous waste disposal information is summarized in Table 5, and waste manifests are included in Appendix C.

Summary of Waste Pumping					
Waste Description	Waste Profile Number	Quantity	Transport Container	Disposal Volume (Gallons)	Disposal Weight (Tons)
Inorganic Acid Liquids	07038645-0	2	Tanker Trucks	6568	36.0
Inorganic Alkaline Liquids	070309247-1	1	Tanker Trucks	3255	15.2
RCRA Wastewater	070308606-0	11	Tanker Trucks and Vacuum Boxes	36,960	159.3
Non-RCRA Wastewater	070308611-0	7	Tanker Trucks	28,038	119.4
Notes: RCRA = Resource Conservation and Recovery Act					

### 6.4.2 SOLID HAZARDOUS WASTE MANAGEMENT

After removal of liquids, sorbent was used to solidify any remaining liquid in the tank. The solid hazardous waste was then removed and deposited in cubic yard boxes lined with polyethylene liners. Solids remaining on the floors after tank removal were loaded into cubic-yard boxes as well. Acidic solids, alkaline solids, and neutral solids were segregated and packed separately. Containers were affixed with all necessary labelling before being transported to the landfill for disposal. A total of 132 cubic yard boxes of alkaline solid hazardous waste and 11 cubic yard boxes of acidic solid hazardous waste were removed from the Site.

When loading the dry van trailers, containers of acidic and alkaline hazardous solid wastes were not loaded in adjacent spaces. If a mix of containers with acidic and alkaline hazardous solid wastes needed to be loaded onto one van trailer, then they were loaded with at least one container of

neutral solids in the space between them. The solid hazardous disposal information is summarized in Table 6, and waste manifests are included in Appendix C.

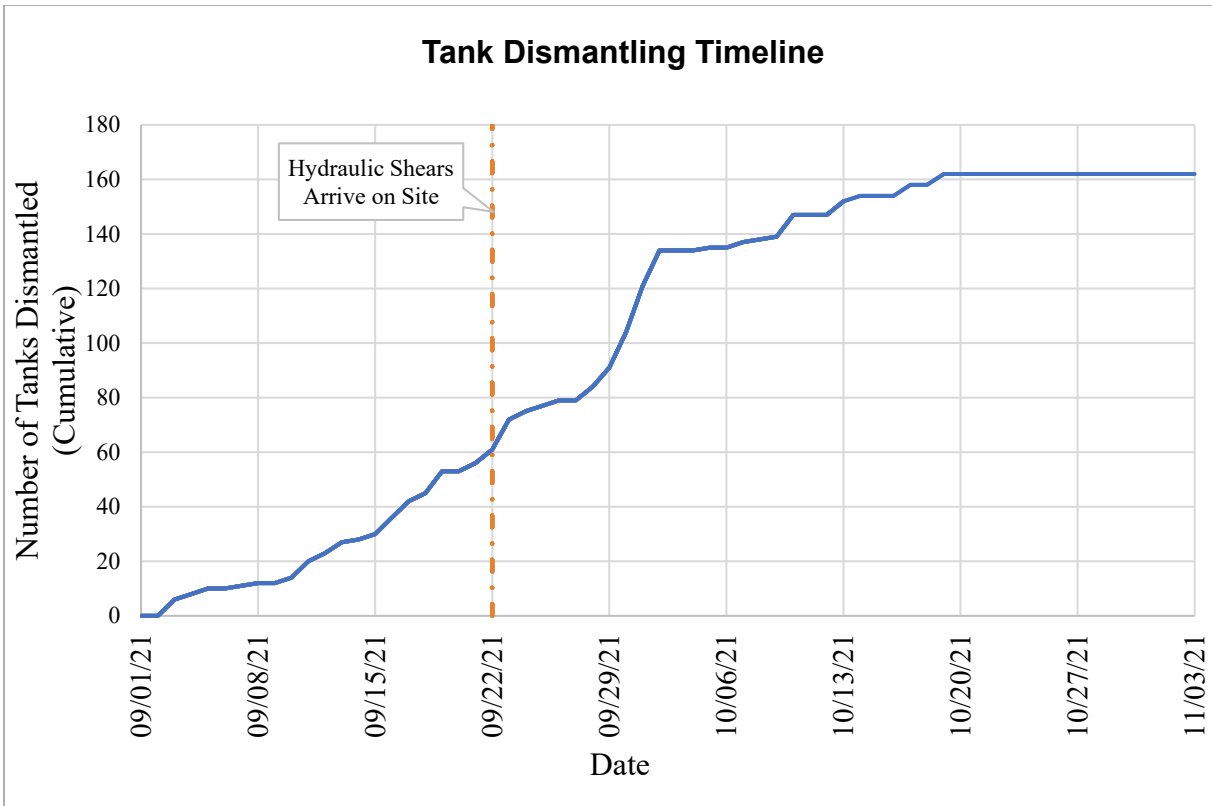
Summary of Solid Hazardous Waste			
Waste Description	Waste Profile Number	Transport Container	Disposal Volume (CY)
Alkaline Solids	07038645-0	Cubic Yard Box	132
Acid Solids	070309247-1	Cubic Yard Box	11

### 6.4.3 TANK DISMANTLING AND DISPOSAL

Tanks were transported to tank dismantling areas for dismantling. Dismantled tanks, liners, and other scrap were loaded into bins for disposal. The blowtorch tank cutting activities were located in F Yard. Due to the large size and number of tanks, plasma cutters were procured to supplement the blow torches and improve the cutting rate. Because the tanks on the site were highly contaminated with plating wastes, all dismantled tanks were disposed of as RCRA-hazardous debris.

To expedite the tank dismantling activities, an excavator with hydraulic shears was procured and commenced tank dismantling activities in the C-G Building on September 22, 2021. The hydraulic shears drastically improved the tank dismantling rate and led to the completion of all tank dismantling activities in the C-G and A-B Buildings on October 9, 2021. After completing work in the C-G and A-B Buildings, the hydraulic shears were moved to F Yard. The final Site tanks were dismantled in F Yard on October 19, 2021.

Sixty-one roll-off bins containing a total of 240 tons of dismantled tanks and other scrap were transported to US Ecology Nevada for disposal as solid hazardous waste. The RCRA debris disposal information is summarized in Table 7, and waste manifests are included in Appendix C. Photographs of the tank dismantling activities are included in the Removal Action Photograph Log in Appendix B. The figure below tracks the progress of the tank dismantling activities over the course of the response.



## 6.5 ACM REMOVAL

A certified asbestos contractor conducted a removal of ACM in F Yard and in the A-B Building on September 27 and 28, 2021. Piping and pipe insulation from above the A Line boiler and the F Line boiler were removed, bagged, and disposed of. The asbestos contractor removed a 1 cubic yard (CY) of ACM consisting of 17 bags of material. The ACM was transported to Altamont Landfill in Livermore, California, for disposal. The ACM disposal information is summarized in Table 8, and waste manifests are included in Appendix C.

## 6.6 PIPE REMOVAL

Each area of the Site contained piping associated with the former electroplating activities. Many of the pipes were unlabeled, and pipes that were labeled were difficult to track due to the disorganized nature of the piping system at the Site. Contents of piping present at the Site included acids and other chemical products, wastewater, clean water (city water), electrical conveyance, and gas lines. Clean water lines and gas lines were left in place. Electrical conveyances were only removed when necessary, (e.g., when tanks could not otherwise be accessed or removed) and only after an electrician had inspected the electrical lines to ascertain that the removal would be safe. Subsurface piping and drains were not assessed in this removal.

Piping was assessed, then systematically drained into containers, cut, and removed from each tank before removing the tanks. Networks of pipes were assessed in smaller sections where possible by segregating a portion of the network through the closing of valves. Each segregated section was drained systematically into containers before cutting and removing the piping for disposal.

## **6.7 DISPOSAL OF SMALL CONTAINERS**

Containers were gathered from throughout the Site and staged in the D-E Building for inventory, hazard categorization, and processing. In addition to the 55-gallon drums, a total of 196 small containers ranging in size from one-pint containers to 30-gallon drums were inventoried. Labeling present on the containers was noted, and hazard categorization testing was conducted on a subset of the containers to confirm the accuracy of the labels. Unlabeled materials were field-tested using the HAZCAT<sup>®</sup> system on a case-by-case basis to determine their hazard classes. Liquid and solid hazardous wastes were bulked, overpacked, or lab packed according to their hazard categorization results and waste quantities.

Bulking refers to the mixing of similar wastes for disposal. Bulked liquids included chromic acid solutions, basic solutions, and neutral liquids with high metal content. Bulked solids included zinc and cadmium anode balls in 5-gallon buckets, waste oxidizing solid, and cyanide solids from the A-B Building drains. Drums that were in poor condition but not able to be transferred or bulked with other drums were overpacked for disposal. A total of approximately 4200 gallons of liquid hazardous and nonhazardous waste were bulked or overpacked for disposal. A total of approximately 3.7 tons of solid hazardous waste were bulked for disposal. The bulked and overpacked solid and liquid waste disposal information is summarized in Tables 5 and 6, respectively. Copies of the waste manifests are included in Appendix C.

Lab packing refers to the packing of several containers containing waste of the same hazard category into a single, larger container for disposal. The lab packs are lined with polyethylene liners and include enough sorbent material to solidify any possible liquid spill within the container. Lab pack containers included 14- and 55-gallon polyethylene drums and 5-gallon polyethylene buckets. Some lab packs only contained one container, such as the 50% hydrofluoric acid bottles, which were each disposed of in closed, 5-gallon polyethylene buckets packed with sorbent compatible with the hydrogen fluoride. A total of 19 lab packs were packed and transported from the Site for disposal. The lab pack disposal information is summarized in Table 9. Copies of the waste manifests are included in Appendix C.

## **6.8 FLOOR CLEANING**

After removal of tanks and other waste from the floor surfaces of each area of the Site, the floors were cleaned to remove contamination. A-B Building, C-G Building, and F Yard floors were swept then pressure washed with water. The pressure washing liquid was vacuumed up during the pressure washing or alternatively deposited in the sumps for later pumping. The floor in D-E Building was swept and partially vacuumed; however, it was not pressure washed to avoid the risk of mobilizing contamination in areas where the poor condition of the concrete presented a potential pathway to soil.

## **6.9 WASTE DISPOSAL**

The ACM waste, totaling 1 CY, was transported to Altamont Landfill in Livermore, California, for disposal. All other waste was transported to US Ecology Nevada, Inc., a RCRA-permitted landfill located in Beatty, Nevada, for disposal. The table below summarizes the total disposal quantities for each waste disposal category. The waste disposal information is included in Tables



5 through 9, and copies of the waste manifests are included in Appendix C.

Summary of Waste Disposal			
Waste Category	Containers	Total Disposal Volume	Total Disposal Weight
Liquid Hazardous Waste	14 Tanker Trucks 12 Polyethylene Totes 15 Drums	50,657 Gallons*	230.13 Tons*
Liquid Non-Hazardous Waste	7 Tanker Trucks 6 Drums	28,368 Gallons*	120.76 Tons*
Solid Hazardous Waste	144 Cubic Yard Boxes 31 Drums	147.8 Cubic Yards*	138.6 Tons*
Hazardous Debris	61 Roll Off Boxes	789 Cubic Yards	240 Tons
Asbestos Containing Material	1 Container	1 Cubic Yard	--
Lab Packs	19 Drums	118.4 Gallons*	1022.7 Pounds*
Notes: * = Includes estimated values			

Summary of Waste Disposal Quantities		
Description	Waste Profile Number	Total Disposal Quantity
Inorganic Acid Liquid	070308645-0	5,722 gallons
Inorganic Alkaline Liquid	070309247-1	3,364 gallons
RCRA Wastewater and Sludge, Bulk	070308606-0	37,785 gallons
Non-RCRA Wastewater	070308611-0	28,038 gallons
Nitric Acid	070137709-11328	55 gallons
Chromic Acid Solution	070137709-11326	785 gallons
Sulfuric Acid Solution	070137709-11327	1265 gallons
Alkaline Solids	070308934-0	132 cubic yards
Acid Solids	070128303-14542	11.5 cubic yards
RCRA Debris	070308688-0	240 tons
Filter Cake	070128302-8793	1.75 cubic yards
Notes: Detail on small containers, lab packs, and bulked drum disposal quantities available in Section 6.9. RCRA = Resource Conservation and Recovery Act		

## 6.10 REMOVAL ACTION AIR MONITORING AND SAMPLING

START was tasked to perform work zone air monitoring and sampling to ensure that removal activities did not create airborne particulates (i.e., dust) at concentrations exceeding the site-specific health-risk-based action levels. Data collected from both air monitoring and air sampling instruments were used to examine exposure of on-site personnel; support PPE decisions; and determine the effectiveness of engineering controls. Overall, Site air monitoring and air sampling ensured the health and safety of Site workers from potential airborne contaminants. Air monitoring and sampling were performed by START in accordance with the Sampling and Analysis Plan (SAP) (WESTON, 2021a) and SSDMP (WESTON, 2021b). The following sections summarize air monitoring and sampling activities.

### 6.10.1 Particulate Air Monitoring

Daily air monitoring was used to identify the real-time presence of particulate matter (PM)  $\leq 10$  microns. Air monitoring consisted of placing TSI® DustTrak aerosol monitors in work areas approximately 5 feet above the ground surface. Air monitoring stations were positioned in all dust generating work areas during the removal action.

Prior to the start of each workday, the DustTraks were calibrated to the manufacturer's specifications and were set up for data logging and real-time work zone air monitoring. Real-time air monitoring allowed personnel to institute engineering controls including work stoppage and water application for dust suppression as needed. The 8-hour time-weighted average (TWA) for PM  $\leq 10$  microns did not exceed site-specific health-risk-based action levels at any of the air monitoring stations during the removal action. A summary of the particulate air monitoring data is included in Table 10.

## 6.10.2 Particulate Air Sampling

Air samples were collected at each DustTrak air monitoring station to confirm that metal particulate COC were not exceeding worker safety levels. Air samples were collected in accordance with the QASP (WESTON, 2021a) and SSDMP (WESTON, 2021b). Air samples were collected CAM 17 metals analysis by National Institute for Occupational Safety and Health (NIOSH Method 7303 and for hexavalent chromium analysis by NIOSH Method 7605. The samples were submitted to Enthalpy Analytical, LLC, in Berkeley, California, for analysis, and the results were compared to the OSHA PEL for each analyte (OSHA, 2017). A summary of particulate air sampling results is included in Table 11. None of the air samples exceeded the OSHA PELs. The table below presents a summary of the particulate air sampling results.

Summary of Particulate Air Sampling Results				
Sample Information	Cadmium	Chromium (Total)	Chromium VI	Lead
Number of Samples	90	90	66	90
Number of Detections	21	87	64	27
Result Range ( $\mu\text{g}/\text{m}^3$ )	ND to 1.9	ND to 28	ND to 1.7	ND to 5.8
OSHA PEL ( $\mu\text{g}/\text{m}^3$ )	5	1000	5	50
Number of Exceedances	0	0	0	0
Notes: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter NA = not applicable ND = none detected OSHA = Occupational Safety and Health Administration PEL = Permissible Exposure Limit				

### *CAM-17 Metals Air Sampling (NIOSH Method 7303)*

SKC AirChek Touch air sampling pumps equipped with a 37-millimeter (mm) three-piece cassette containing a mixed cellulose ester (MCE) 0.8 micrometer ( $\mu\text{m}$ ) filter were calibrated at the beginning of each day to a flow rate of 2 liters per minute using a calibrated flow meter prior to being deployed alongside air monitoring instruments. Final flow rates were calculated at the end of each day using the same calibrated flow meter. Initial and final flow rates were recorded in field logbooks and on field air monitoring/sampling data sheets. Sampling results were compared to OSHA PELs.

### *Hexavalent Chromium Air Sampling (NIOSH Method 7605)*

The CAM 17 metals analysis (NIOSH Method 7303) was unable to differentiate between trivalent chromium (chromium III) and hexavalent chromium (chromium VI) and instead provided a total value for chromium present in the sample. Compared to chromium III, chromium VI presents a much higher risk to human health, and the OSHA PEL for chromium VI is 100 times smaller than

chromium III. To analyze specifically for chromium VI, a separate sample was collected using the same procedure as described for the CAM 17 metals, but with a 37-mm three-piece cassette containing a polyvinyl chloride (PVC) 5 µm membrane filter in place of the MCE filter.

### **6.10.3 Multigas Air Monitoring**

Two MultiRAE Pro and four AreaRAE Pro multi-gas air monitoring meters were used during the removal. The AreaRAE Pro multi-gas meters were equipped with VOC, LEL, carbon monoxide (CO), and oxygen (O<sub>2</sub>) monitoring sensors. The MultiRAE Pro multi-gas meters were equipped with VOC, LEL, CO, hydrogen cyanide, and oxygen monitoring sensors. All instruments were calibrated before their first use on the project and bump tested prior to each workday.

#### *Hydrogen Cyanide Air Monitoring*

The MultiRAE Pro was used for work zone monitoring for hydrogen cyanide. The handheld meter was used to monitor work zones during activities of interest, such as activities where cyanides were detected in the removal assessment sampling area and any activity where alkaline materials might have been released or came into contact with acidic materials.

Hydrogen cyanide was detected by the MultiRAE Pro in the plasma cutter smoke during tank cutting operations, but after further study of the instrument datalog, it was determined that the detection was likely due to a cross sensitivity of the hydrogen cyanide sensor with carbon monoxide gas. Further, after monitoring the breathing zone of the worker who was using the plasma cutter, it was determined that the instrument's detected concentrations of hydrogen cyanide did not exceed OSHA PELs.

#### *Carbon Monoxide Monitoring*

AreaRAE and MultiRAE gas monitors were used to monitor for CO during heavy machinery activity in semi-enclosed areas of the Site. Each equipment operator was given one multi-gas meter to place in their enclosed cabins, and additional meters were used to monitor the CO levels in the room. Alarms were set at half the OSHA PEL. None of the instruments hit an alarm concentration of CO during the removal.

## 7. CONCLUSION

The EPA Region 9 FOSCs tasked START to support removal assessment and TCRA activities at E-D Coat, Inc. located in Oakland, Alameda County, California. The removal assessment was conducted August 3 through 5, 2021. The removal assessment included sampling and pH field testing of liquid waste, solid hazardous waste, and potential ACM at the Site. A survey was conducted to assess the quantity of solid hazardous waste and liquid waste present in tanks, sumps, and containers at the Site. The Site contained corrosive, toxic chemicals in deteriorating tanks, drums, and other containers, presenting the potential for a release of chemicals into the environment. Tables 1 through 4 present summaries of the removal assessment waste quantity survey and sampling results.

EPA determined that deteriorating conditions of tanks and other containers at the Site posed a risk of a potential chemical reaction, fire, or release of hazardous chemicals at the Site. COCs at the Site included corrosive liquids and solids, and potentially toxic cyanide-containing wastes, ACM, and heavy metals.

Between August 29, 2021 and November 3, 2021, EPA and START and ERRS contractors completed a removal action with the objective of mitigating the risk of potential releases of hazardous chemicals into the environment by removing solid hazardous waste, liquid waste, and tanks associated with the former plating and industrial wastewater operations at the Site. ACM was removed, bagged, and disposed of by a certified ACM contractor. Solid hazardous waste, liquid hazardous waste, and liquid non-hazardous waste, were transported to Beatty, Nevada for disposal. Potential contamination of subsurface areas of the Site (soil and groundwater) was not assessed in this removal. Tables 5 through 9 present waste disposal information for the removal and copies of the waste manifests are included in Appendix C.

Work zone air sampling and particulate air monitoring were conducted in indoor and outdoor areas of the Site during all dust generating activities. The air samples were analyzed for CAM 17 metals and hexavalent chromium contamination. Multi-gas air monitoring equipment was used to monitor work zones of interest for hydrogen cyanide and carbon monoxide concentrations in air. Tables 6 and 7 present the air monitoring and air sampling results, respectively.

Photographic documentation for the removal assessment is provided as Appendix A. Photographic documentation for the removal action is provided as Appendix B. Waste Manifests are presented as Appendix C. Laboratory Data Packages and Data Validation Reports are presented in Appendix D.

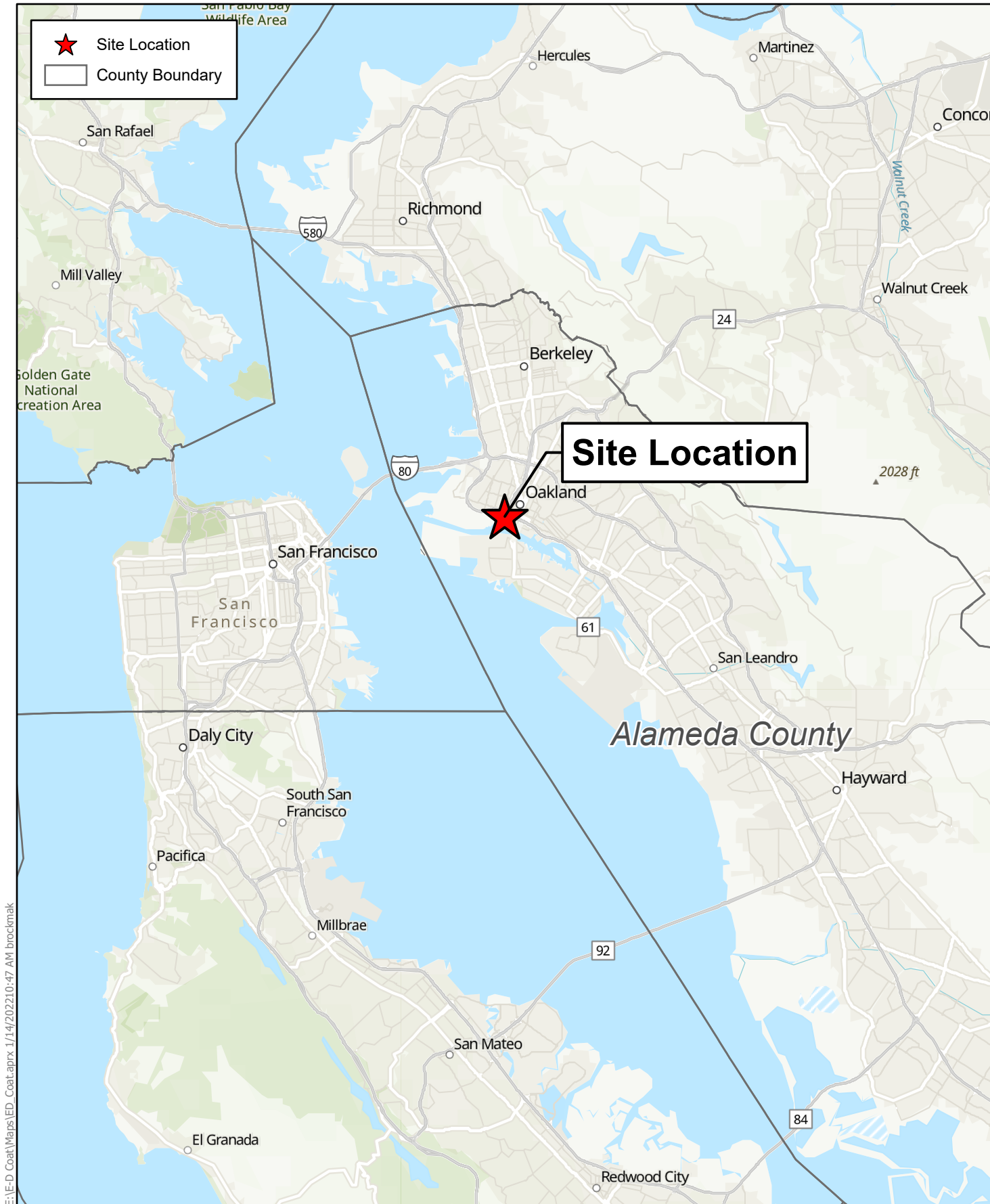
## 8. REFERENCES

- DTSC. 2020. News Release, DTSC Sues Owners of Former Oakland Electroplating Shop. Web site accessed on December 13, 2020. Available at <https://dtsc.ca.gov/2020/03/04/dtsc-sues-owners-of-former-oakland-electroplating-shop/>
- U.S. Environmental Protection Agency (EPA). 1987. 40 Code of Federal Regulations (CFR) Part 763; Asbestos-Containing Materials in Schools; Final Rule. October.
- EPA. 2016. POLREP #1, Plating Solution Transfer Complete E-D Coat A999 Oakland, CA Latitude: 37.7998008 Longitude: -122.2819851. September.
- EPA. 2021. Region 9 Emergency Response, Planning, and Preparedness Branch, Consolidated Site-Specific Health & Safety Plan, E-D Coat, Inc., September 2021
- Occupational Safety and Health Administration (OSHA). 2017. Air Contaminants. 29 CFR 1910.1000 [82 FR 2735, January 9, 2017]. Web site accessed on August 16, 2020. Available at <https://www.osha.gov/dsg/annotated-pels/tablez-3.html#z-3>
- Weston Solutions, Inc. (WESTON). 2021a. Removal Assessment and Time-Critical Removal Action Quality Assurance Sampling Plan for E-D Coat, July.
- WESTON. 2021b. E-D Coat, Inc. Removal Action Site-Specific Data Management Plan. August.

---

## FIGURES

---



E:\E-D Coat\Maps\IED\_Coat.aprx 1/14/2022 10:47 AM brockmak



0 Miles 6

**Contract:**  
68HE0919D0002  
**Task Order:**  
68HE0921F0018  
**DCN:**  
0102-08-AATS

**PREPARED FOR**  
EPA Region 9  
*Pacific Southwest*  
**PREPARED BY**  
Weston Solutions, Inc.  
Concord, CA 94520  
January 2022



**WESTON**  
SOLUTIONS



## FIGURE 1 SITE LOCATION MAP

E-D Coat Inc. Removal Action  
715 4th Street, Oakland  
Alameda County, California





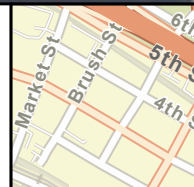
E:\E-D Coat\Maps\IED Coat.aprx 1/14/2022 10:47 AM brockmak



0 Feet 100

**Contract:**  
68HE0919D0002  
**Task Order:**  
68HE0921F0018  
**DCN:**  
0102-08-AATS

**PREPARED FOR**  
EPA Region 9  
*Pacific Southwest*  
**PREPARED BY**  
Weston Solutions, Inc.  
Concord, CA 94520  
January 2022

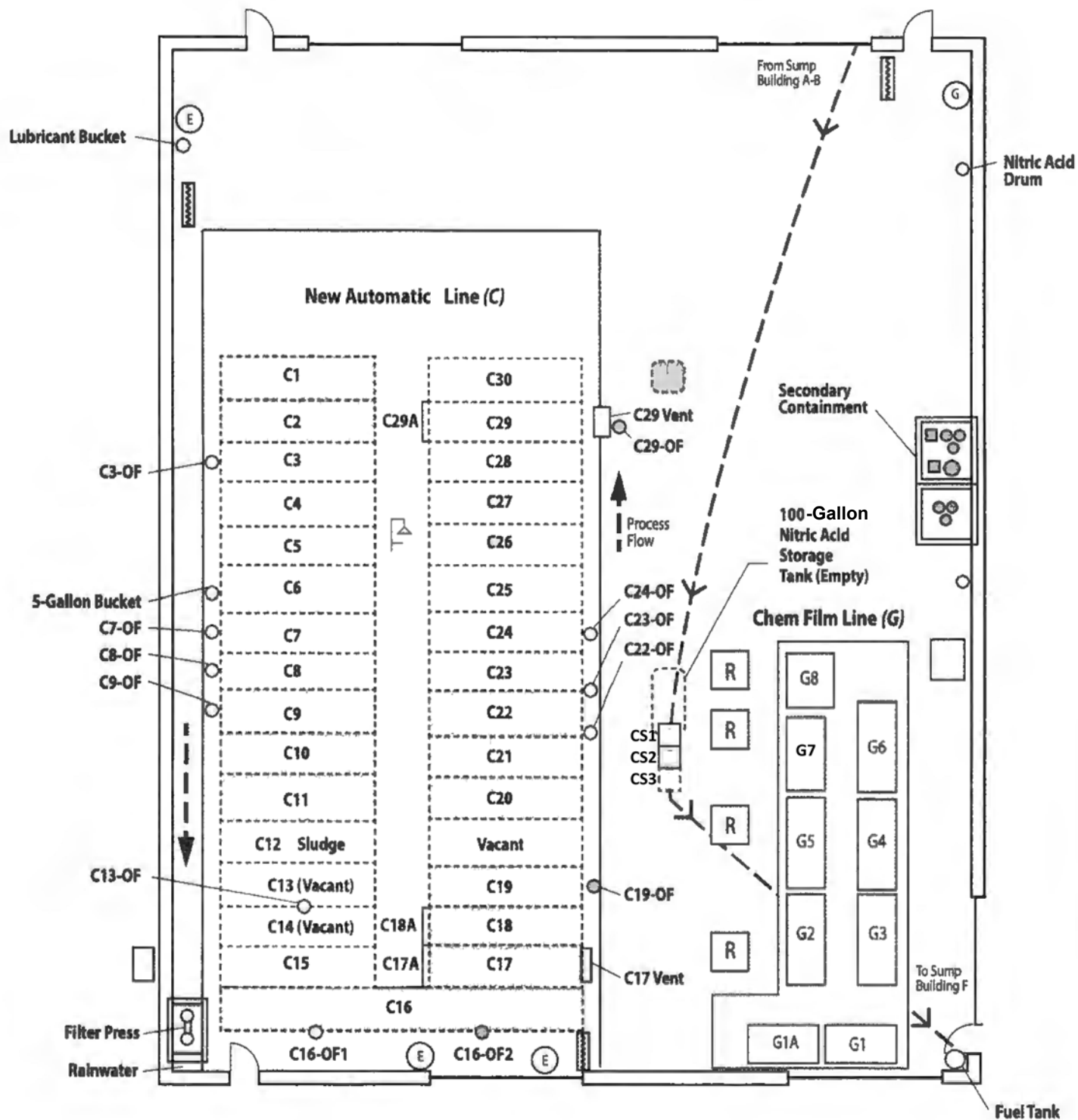


**FIGURE 2**  
**SITE LAYOUT MAP**  
E-D Coat Inc Removal Action  
715 4th Street, Oakland  
Alameda County, California



**FIGURE 3**  
**A-B Building Layout**  
E-D Coat Inc. Removal Action  
715 4th Street, Oakland  
Alameda County, California





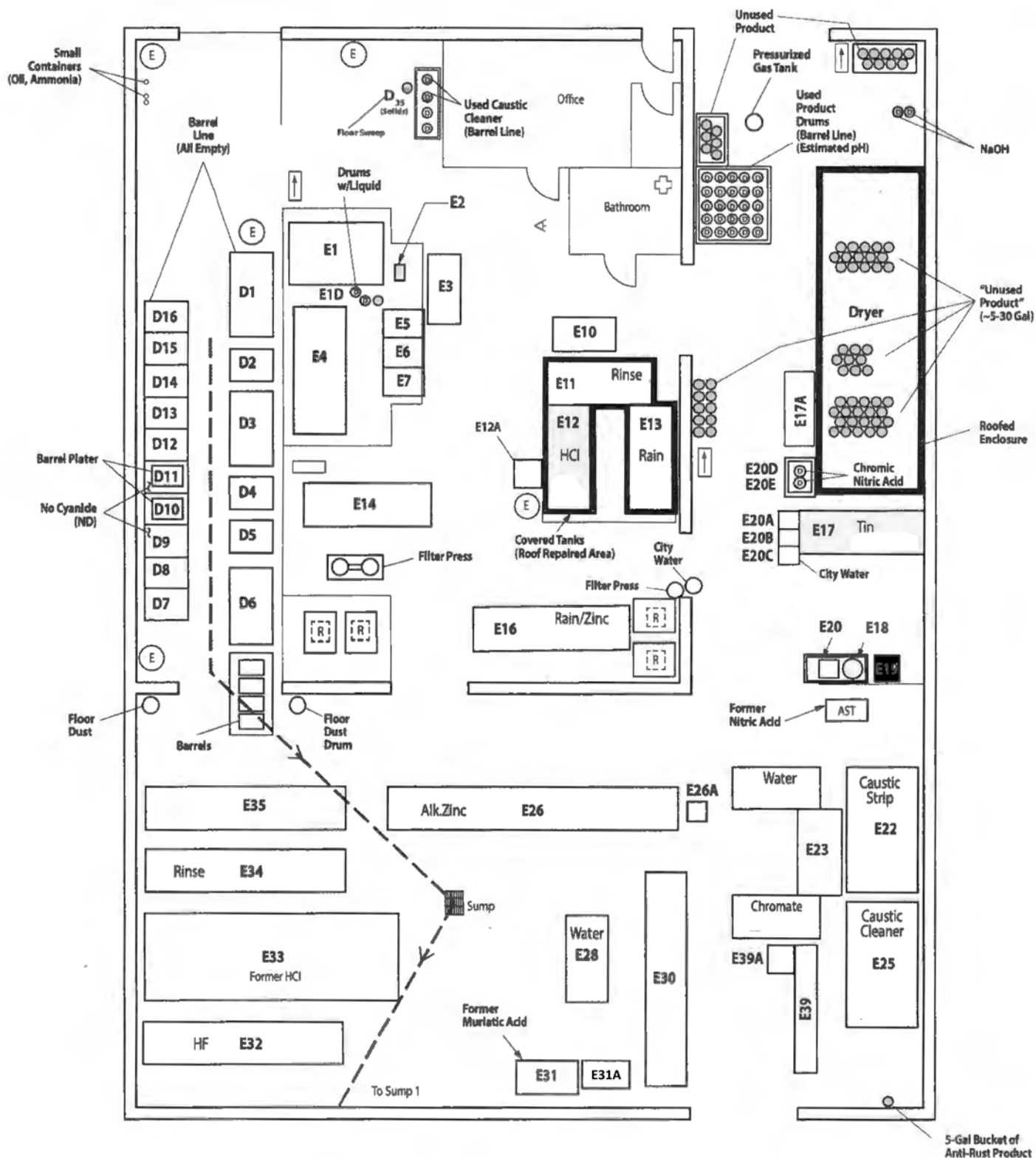
**Notes:**  
This figure was created by modifying figures originally produced by Pangea Environmental Services, Inc. in 2016.

**Contract:**  
68HE0919D0002  
**Task Order:**  
68HE0921F0018  
**DCN:**  
0102-08-AATS

**PREPARED FOR**  
EPA Region 9  
Pacific Southwest  
**PREPARED BY**  
Weston Solutions, Inc.  
Concord, CA 94520  
January 2022



**FIGURE 4**  
**C-G Building Layout**  
E-D Coat Inc. Removal Action  
715 4th Street, Oakland  
Alameda County, California



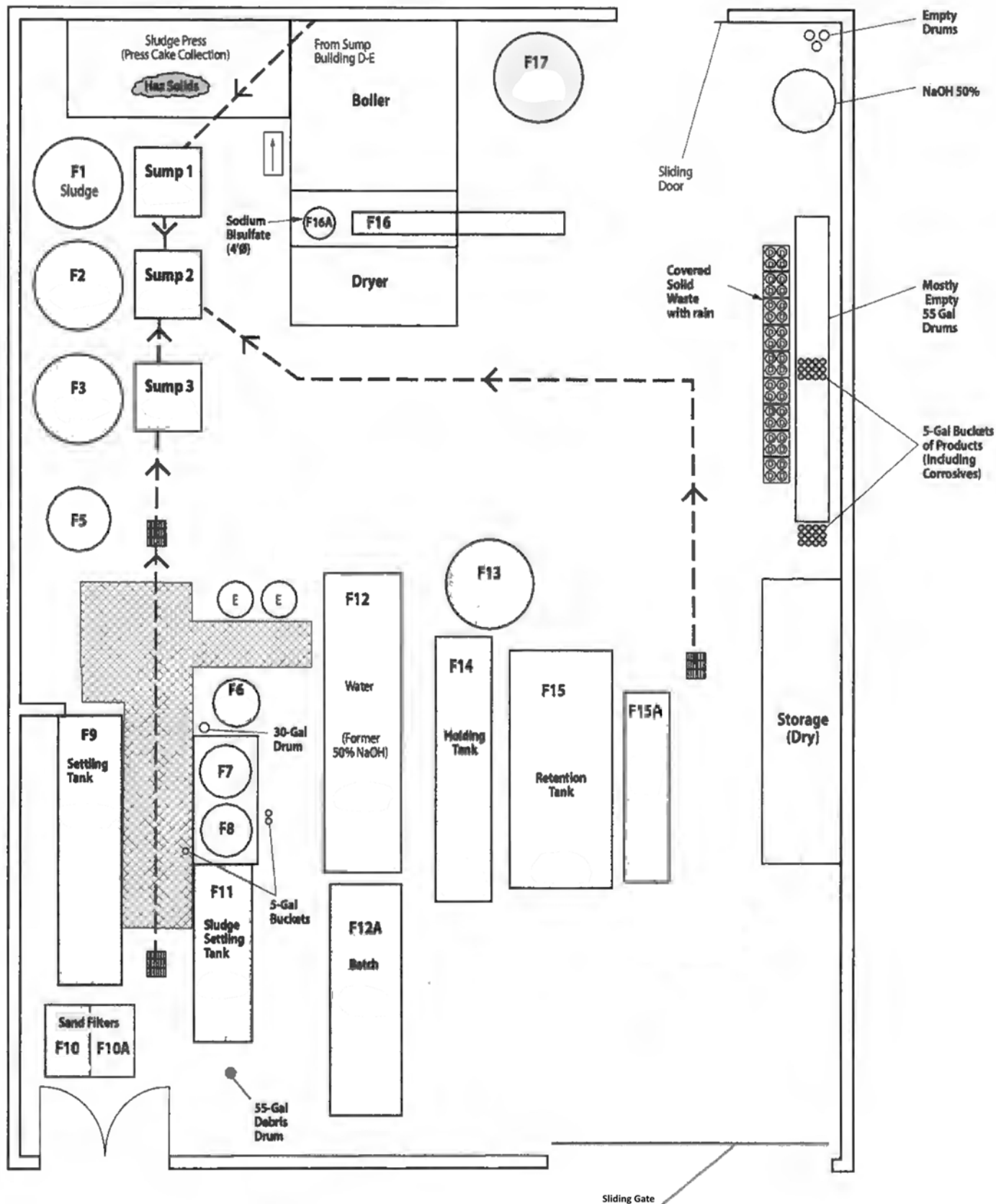
**Notes:**  
This figure was created by modifying figures originally produced by Pangea Environmental Services, Inc. in 2016.

**Contract:**  
68HE0919D0002  
**Task Order:**  
68HE0921F0018  
**DCN:**  
0102-08-AATS

**PREPARED FOR**  
EPA Region 9  
Pacific Southwest  
**PREPARED BY**  
Weston Solutions, Inc.  
Concord, CA 94520  
January 2022



**FIGURE 5**  
**D-E Building Layout**  
E-D Coat Inc. Removal Action  
715 4th Street, Oakland  
Alameda County, California



**FIGURE 6**  
**F Yard Layout**  
E-D Coat Inc. Removal Action  
715 4th Street, Oakland  
Alameda County, California

---

## TABLES

---

**Table 1**  
**Waste Quantity Survey**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Site Area	Sub-Area	Description of Containers	Total Container Capacity (Gallons)	Estimated Liquid Waste Volume (Gallons)	Estimated Solid Waste Volume (Gallons)	pH Range
A-B Building	A Line Tanks	- 20 Tanks	6,700	800	1,400	pH 1-12
	B Line Tanks	- 18 Tanks	11,600	1,100	1,000	pH 1-11
	Other	- 3 Sumps - Assorted Small Containers - Dryer - Acid Bin - Nitric Acid Tank - Filter Powder - Assorted 55-Gallon Drums - Pipes Containing Hazardous Liquids	--	--	--	--
C-G Building	C Line Tanks	- 42 Tanks - 3 Sumps	71,000	11,600	17,300	pH 1-14
	G Line Tanks	- 9 Tanks	5,100	0	430	--
	Other	- Assorted Small Containers - Baker Tank, 8000-Gallon Capacity - Pipes Containing Hazardous Liquids - One Trench/Sump Between C-G Building and 4th Street	--	--	--	--
E-D Building	E Line Tanks	- 45 Tanks - 2 Sumps	32,800	6,300	7,300	pH 1-12
	D Line Tanks	- 16 Tanks	6,400	0	86	pH 1-9
	Other	- Twenty-two 55-Gallon Drums Containing Liquid Waste Originally From D Line - Approximately 200 Small Containers Containing Solid and Liquid Waste in Northeast Section - Pipes Containing Hazardous Liquids	--	--	--	--
F Yard	F Line Tanks	- 20 Tanks - 3 Sumps	65,800	35,900	12,000	pH 1-10
	Other	- Adler Tank, 8000-Gallon Capacity - More Than thirty 55-Gallon Drums Containing Solid and Liquid Waste - Dryer - Boiler - Sludge Press - Surface Water Collection Sump - Pipes Containing Hazardous Liquids	--	--	--	--

Note:

-- Not available

pH = Logarithm of hydrogen ion concentration

**Table 2**  
**Asbestos Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID	Date Collected	Total Asbestos (Percent of Total Mass)	Sample Location Description	Layer Number	Layer Description	Layer Percent of Total Mass	Asbestos Type 1	Asbestos Type 1 Percent of Layer Mass	Asbestos Type 2	Asbestos Type 2 Percent of Layer Mass
EDC-ACM-A1-1-6	08/05/21	ND	Pipe insulation above tank A1	1	Off-White Semi-Fibrous Material	100	--	--	--	--
EDC-ACM-A9-1-6	08/05/21	ND	Pipe insulation above tank A9	1	Off-White Semi-Fibrous Material	100	--	--	--	--
EDC-ACM-ABOILER1-1-6	08/05/21	ND	A line boiler jacket	1	Yellow Fibrous Material	100	--	--	--	--
EDC-ACM-ABOILER2-1-6	08/05/21	14	Pipe insulation above A Line boiler	1	Off-White Semi-Fibrous Material	95	Amosite	15	--	--
				2	Paint	5	--	--	--	--
EDC-ACM-C4-1-6	08/05/21	ND	Insulation board between tanks C4 and C3	1	Yellow Foam	95	--	--	--	--
				2	Paint	5	--	--	--	--
EDC-ACM-E4-1-6	08/05/21	ND	Pipe insulation above tank E4	1	Yellow Fibrous Material	100	--	--	--	--
EDC-ACM-E11-1-6	08/05/21	ND	Pipe insulation above tank E11	1	Yellow Fibrous Material	90	--	--	--	--
				2	White Semi-Fibrous Material	10	--	--	--	--
EDC-ACM-E14-1-6	08/05/21	ND	Pipe insulation above tank E14	1	Yellow Fibrous Material	90	--	--	--	--
				2	White Semi-Fibrous Material	10	--	--	--	--
EDC-ACM-C17-1-6	08/05/21	ND	Pipe insulation above tank C17	1	Yellow Fibrous Material	90	--	--	--	--
				2		10	--	--	--	--
EDC-ACM-E25-1-6	08/05/21	ND	Pipe insulation above tank E25	1	Yellow Fibrous Material	90	--	--	--	--
				2	White Semi-Fibrous Material	10	--	--	--	--
EDC-ACM-E31-1-6	08/05/21	ND	Pipe insulation above tank E31	1	Yellow Fibrous Material	90	--	--	--	--
				2	White Semi-Fibrous Material	10	--	--	--	--
EDC-ACM-FBOILER1-1-6	08/05/21	2	Pipe insulation above F boiler	1	Yellow Fibrous Material	90	--	--	--	--
				2	White Semi-Fibrous Material	10	Chrysotile	2	Amosite	15
EDC-ACM-FBOILER2	09/02/21	ND	F Yard boiler jacket	1	Grey Fibrous Material	--	--	--	--	--
				2	Brown Non-Fibrous Material	--	--	--	--	--
EDC-ACM-FKILN1	09/02/21	ND	F Yard kiln jacket	1	Grey Fibrous Material	--	--	--	--	--
				2	Brown Non-Fibrous Material	--	--	--	--	--
EDCA-ACM-01-090721	09/07/21	5	Pipe insulation above A Line boiler	1	Off-White Semi-Fibrous Material	100	Chrysotile	5	--	--
EDCA-ACM-02-090721	09/07/21	3	Pipe insulation above A Line boiler	1	Off-White Semi-Fibrous Material	60	Amosite	5	--	--
				2	Brown Semi-Fibrous Material	40	ND	--	--	--
EDCA-ACM-03-090721	09/07/21	5	Pipe insulation above A Line boiler	1	Off-White Semi-Fibrous Material	100	Amosite	5	--	--
EDCA-ACM-04-090721	09/07/21	ND	Pipe insulation above A Line boiler	1	Yellow Fibrous Material	100	ND	--	--	--
EDCA-ACM-05-090721	09/07/21	5	Pipe insulation above A Line boiler	1	Off-White Semi-Fibrous Material	100	Amosite	5	--	--
EDCA-ACM-06-090721	09/07/21	ND	Pipe insulation above A Line boiler	1	Off-White Semi-Fibrous Material	100	ND	--	--	--

Note:

This table includes sampling results from the removal assessment and the removal action.

ID = Identification

ND = None detected



**Table 3**  
**Waste Characterization Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-A1/A1A-1-3	EDC-A4-2-3	EDC-A8/A8A-1-3	EDC-B2-1-3	EDC-B3-1-3	EDC-B4-2-3	EDC-B5-2-3	EDC-B6-1-3
Sample Date			08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21
Sample Media			Solid	Liquid	Solid	Solid	Solid	Liquid	Liquid	Solid
Analyte	Screening Level	Units	pH by Field pH Meter							
pH	<2 OR >12.5	s.u.	12.0	1.0	11.0	11.0	11.0	1.0	1.0	4.0
Analyte	Screening Level	Units	TCLP Metals by 6010B							
Arsenic	5	mg/l	0.21	0.31 J	0.018 J	--	0.015 J	0.56 J	0.72 J	ND (<0.03)
Barium	100	mg/l	0.23 J	ND (<100)	0.25 J	--	0.9 J	ND (<100)	0.17 J	0.1 J
Cadmium	1	mg/l	0.0053 J	34	0.0035 J	--	0.015	0.78 J	1.2 J	0.0044 J
Chromium	5	mg/l	0.17	380	0.014 J	--	0.028 J	880	1,400	0.0072 J
Lead	5	mg/l	0.049	3.3	0.016	--	0.017	0.4 J	0.59 J	0.015 J
Selenium	1	mg/l	0.0036 J	ND (<3)	ND (<0.03)	--	0.0082 J	ND (<3)	0.39 J	0.023 J
Silver	5	mg/l	0.008 J	ND (<1.5)	0.00076 J	--	0.031	ND (<1.5)	1 J	ND (<0.015)
Analyte	Screening Level	Units	TCLP Metals by 7470A							
Mercury	0.2	mg/l	ND (<0.01)	ND (<0.001)	ND (<0.01)	--	ND (<0.01)	ND (<0.001)	ND (<0.01)	0.00097 J
Analyte	Screening Level	Units	STLC Metals by 6010B							
Antimony	15	mg/l	0.17 J	ND (<9)	ND (<0.9)	ND (<0.9)	ND (<0.9)	ND (<9)	ND (<9)	ND (<0.9)
Arsenic	5	mg/l	0.44	ND (<3)	ND (<0.3)	ND (<0.3)	ND (<0.3)	0.2 J	0.41 J	ND (<0.3)
Barium	100	mg/l	0.058 J	ND (<3)	ND (<0.3)	0.067 J	ND (<0.3)	ND (<3)	ND (<3)	0.11 J
Beryllium	0.75	mg/l	ND (<0.15)	ND (<1.5)	ND (<0.15)	ND (<0.15)	ND (<0.15)	ND (<1.5)	ND (<1.5)	ND (<0.15)
Cadmium	1	mg/l	ND (<0.15)	31	ND (<0.15)	ND (<0.15)	ND (<0.15)	0.75 J	1 J	0.047 J
Chromium	5	mg/l	0.67	410	0.046 J	0.7	0.074 J	920	1,500	2.2
Cobalt	80	mg/l	ND (<0.15)	0.97 J	ND (<0.15)	ND (<0.15)	ND (<0.15)	0.74 J	3.8	0.29
Copper	25	mg/l	18	51	0.46	61	1.1	110	190	1.7
Lead	5	mg/l	0.31	6.5	ND (<0.15)	ND (<0.15)	ND (<0.15)	1.2 J	0.97 J	ND (<0.15)
Molybdenum	350	mg/l	0.89	2.2 J	ND (<0.3)	0.12 J	0.099 J	2 J	2.6 J	ND (<0.3)
Nickel	20	mg/l	0.14 J	25	0.073 J	0.046 J	ND (<0.6)	38	34	0.87
Selenium	1	mg/l	ND (<0.3)	ND (<3)	ND (<0.3)	ND (<0.3)	ND (<0.3)	ND (<3)	ND (<3)	ND (<0.3)
Silver	5	mg/l	ND (<0.15)	ND (<1.5)	ND (<0.15)	ND (<0.15)	ND (<0.15)	ND (<1.5)	ND (<1.5)	0.051 J
Thallium	7	mg/l	ND (<1.5)	0.3 J	ND (<1.5)	ND (<1.5)	ND (<1.5)	ND (<15)	0.39 J	ND (<1.5)
Vanadium	24	mg/l	ND (<0.15)	0.31 J	ND (<0.15)	ND (<0.15)	ND (<0.15)	0.25 J	0.31 J	ND (<0.15)
Zinc	250	mg/l	160	83,000	240	32	15	80,000	79,000	59
Analyte	Screening Level	Units	Cyanide by EPA Method 9010C							
Total Cyanide	590	mg/l	0.95 J	--	1.7	0.47 J	0.12 J	--	--	--
Amenable Cyanide	30	mg/l	0.95 J	--	--	--	--	--	--	--

**Table 3**  
**Waste Characterization Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-B7-1-3	EDC-B7A-1-3	EDC-B8-1-3	EDC-B9-2-3	EDC-C3-2-3	EDC-C5-2-3	EDC-C6-2-3	EDC-C18-2-3	EDC-C19-2-3	EDC-C20-2-3
Sample Date			08/03/21	08/03/21	08/03/21	08/03/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21
Sample Media			Solid	Solid	Solid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
Analyte	Screening Level	Units	pH by Field pH Meter									
pH	<2 OR >12.5	s.u.	10.0	11.0	10.0	1.0	10.0	2.0	3.0	12.0	9.5	10.0
Analyte	Screening Level	Units	TCLP Metals by 6010B									
Arsenic	5	mg/l	ND (<0.03)	ND (<0.03)	--	ND (<1.5)	0.49	0.28 J	0.15 J	0.12 J	0.0089 J	ND (<0.03)
Barium	100	mg/l	0.071 J	0.13 J	--	0.069 J	0.68 J	2.3 J	3.4 J	1.1 J	0.38 J	0.48 J
Cadmium	1	mg/l	ND (<0.015)	0.0068 J	--	1.1	0.0096 J	11	14	0.59	0.011 J	ND (<0.015)
Chromium	5	mg/l	0.0022 J	0.06	--	82	0.03 J	1,100	890	24	0.036	0.0057 J
Lead	5	mg/l	ND (<0.015)	0.89	--	0.12 J	0.25	250	380	0.19 J	0.011 J	0.005 J
Selenium	1	mg/l	ND (<0.03)	ND (<0.03)	--	ND (<1.5)	0.027 J	ND (<0.75)	ND (<3)	ND (<0.6)	0.0038 J	0.0021 J
Silver	5	mg/l	ND (<0.015)	0.019	--	0.038 J	ND (<0.15)	ND (<0.38)	ND (<1.5)	ND (<0.3)	0.00099 J	ND (<0.015)
Analyte	Screening Level	Units	TCLP Metals by 7470A									
Mercury	0.2	mg/l	ND (<0.01)	ND (<0.01)	--	0.0001 J	ND (<0.01)	0.0001 J	ND (<0.001)	0.00034 J	ND (<0.001)	0.0001 J
Analyte	Screening Level	Units	STLC Metals by 6010B									
Antimony	15	mg/l	ND (<0.9)	ND (<0.9)	ND (<0.9)	ND (<9)	ND (<0.9)	ND (<9)	ND (<9)	ND (<0.9)	ND (<0.09)	ND (<0.9)
Arsenic	5	mg/l	ND (<0.3)	ND (<0.3)	ND (<0.3)	ND (<3)	0.49	0.17 J	0.25 J	0.085 J	0.0092 J	ND (<0.3)
Barium	100	mg/l	ND (<0.3)	ND (<0.3)	0.028 J	ND (<3)	0.06 J	1.9 J	2.5 J	0.051 J	0.0074 J	ND (<0.3)
Beryllium	0.75	mg/l	ND (<0.15)	ND (<0.15)	ND (<0.15)	0.053 J	ND (<0.15)	ND (<1.5)	ND (<1.5)	0.0037 J	ND (<0.015)	ND (<0.15)
Cadmium	1	mg/l	ND (<0.15)	ND (<0.15)	ND (<0.15)	1.1 J	0.0053 J	11	13	0.36	0.011 J	ND (<0.15)
Chromium	5	mg/l	0.14 J	0.29 J	0.62	83	0.025 J	990	880	15	0.011 J	ND (<0.3)
Cobalt	80	mg/l	ND (<0.15)	0.02 J	ND (<0.15)	1 J	0.024 J	14	13	1.8	0.025	ND (<0.15)
Copper	25	mg/l	0.2 J	3.3	2.4	1.3 J	0.97	3,200	3,200	13	0.68	0.16 J
Lead	5	mg/l	ND (<0.15)	3.2	0.14 J	0.15 J	0.25	270	360	0.14 J	0.0015 J	ND (<0.15)
Molybdenum	350	mg/l	ND (<0.3)	0.091 J	ND (<0.3)	ND (<3)	16	38	32	2	0.36	0.094 J
Nickel	20	mg/l	0.16 J	0.19 J	ND (<0.6)	42	0.25 J	480	430	0.61	0.15	ND (<0.6)
Selenium	1	mg/l	ND (<0.3)	ND (<0.3)	ND (<0.3)	ND (<3)	ND (<0.3)	ND (<3)	0.2 J	ND (<0.3)	ND (<0.03)	ND (<0.3)
Silver	5	mg/l	ND (<0.15)	ND (<0.15)	ND (<0.15)	ND (<1.5)	ND (<0.15)	ND (<1.5)	ND (<1.5)	ND (<0.15)	ND (<0.015)	ND (<0.15)
Thallium	7	mg/l	ND (<1.5)	ND (<1.5)	ND (<1.5)	ND (<15)	ND (<1.5)	1.4 J	1.1 J	0.053 J	0.0054 J	ND (<1.5)
Vanadium	24	mg/l	ND (<0.15)	ND (<0.15)	ND (<0.15)	0.33 J	ND (<0.15)	3.1	2.7	0.012 J	ND (<0.015)	ND (<0.15)
Zinc	250	mg/l	41	37	75	320	57	110,000	120,000	340	2.1	0.47 J
Analyte	Screening Level	Units										
Total Cyanide	590	mg/l	43	0.13 J	1.8	--	0.036 J	0.01 J	0.019 J	2.3	0.15	0.46
Amenable Cyanide	30	mg/l	--	--	--	--	--	--	--	--	--	--

**Table 3**  
**Waste Characterization Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-C21-2-3	EDC-C22-2-3	EDC-CS1-2-3	EDC-CS2-2-3	EDC-CS3-2-3	EDC-D6-1-3	EDC-E13-2-3	EDC-E16-2-3	EDC-E22-1-3	EDC-E25-1-3
Sample Date			08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21
Sample Media			Liquid	Liquid	Liquid	Liquid	Liquid	Solid	Liquid	Liquid	Solid	Solid
Analyte	Screening Level	Units	pH by Field pH Meter									
pH	<2 OR >12.5	s.u.	5.0	5.0	5.0	2.0	10.0	5.0	11.0	5.0	12.0	12.0
Analyte	Screening Level	Units	TCLP Metals by 6010B									
Arsenic	5	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.75)	ND (<0.3)	0.0071 J	0.002 J	0.17	ND (<0.15)	0.004 J	0.048
Barium	100	mg/l	0.76 J	0.48 J	1.8 J	2.8 J	0.36 J	0.82 J	0.16 J	0.26 J	0.63 J	1.1
Cadmium	1	mg/l	5.7	1.7	3.8	15	0.012 J	3.7	0.0032 J	43	0.036	0.48
Chromium	5	mg/l	0.0043 J	0.011 J	ND (<0.75)	23	0.0062 J	0.047	0.0055 J	4.1	0.0024 J	0.35
Lead	5	mg/l	0.0024 J	0.016	0.055 J	27	0.0025 J	0.051	0.07	0.33	ND (<0.015)	0.0083 J
Selenium	1	mg/l	0.013 J	0.056	0.084 J	0.24 J	0.0043 J	0.0065 J	0.0085 J	0.087 J	ND (<0.03)	0.0081 J
Silver	5	mg/l	ND (<0.015)	ND (<0.015)	ND (<0.38)	ND (<0.15)	0.0081 J	0.014 J	0.012 J	ND (<0.075)	0.00096 J	0.0024 J
Analyte	Screening Level	Units	TCLP Metals by 7470A									
Mercury	0.2	mg/l	ND (<0.01)	0.00034 J	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.01)	ND (<0.01)	ND (<0.001)	ND (<0.01)	ND (<0.01)
Analyte	Screening Level	Units	STLC Metals by 6010B									
Antimony	15	mg/l	ND (<0.09)	ND (<0.09)	ND (<0.09)	ND (<2.3)	ND (<0.09)	0.39 J	0.62 J	ND (<9)	ND (<0.9)	ND (<0.9)
Arsenic	5	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.75)	0.0074 J	ND (<0.3)	0.17 J	ND (<3)	ND (<0.3)	0.17 J
Barium	100	mg/l	0.14	0.2	0.78	1.5	0.0032 J	0.083 J	ND (<0.3)	0.15 J	ND (<0.3)	0.24 J
Beryllium	0.75	mg/l	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.38)	ND (<0.015)	ND (<0.15)	ND (<0.15)	ND (<1.5)	ND (<0.15)	ND (<0.15)
Cadmium	1	mg/l	5.4	1.5	4.4	14	0.012 J	5.1	ND (<0.15)	32	ND (<0.15)	0.053 J
Chromium	5	mg/l	0.0027 J	0.0095 J	ND (<0.03)	24	0.005 J	0.38	ND (<0.3)	4.2	0.03 J	1.3
Cobalt	80	mg/l	0.59	2.1	0.74	4.3	0.017	ND (<0.15)	ND (<0.15)	3.4	0.058 J	0.059 J
Copper	25	mg/l	2	6.2	49	180	7.7	49	0.15 J	38	12	7.8
Lead	5	mg/l	0.0017 J	0.021	0.095 J	28	0.005 J	0.38	0.087 J	0.33 J	ND (<0.15)	ND (<0.15)
Molybdenum	350	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.75)	0.28	0.075 J	0.59	ND (<3)	0.89	0.68
Nickel	20	mg/l	5.4	9.3	13	84	0.2	1.5	ND (<0.6)	5.2 J	0.31 J	0.45 J
Selenium	1	mg/l	0.0095 J	0.049	0.038	0.15 J	ND (<0.03)	ND (<0.3)	ND (<0.3)	ND (<3)	ND (<0.3)	ND (<0.3)
Silver	5	mg/l	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.38)	0.008 J	ND (<0.15)	ND (<0.15)	ND (<1.5)	ND (<0.15)	ND (<0.15)
Thallium	7	mg/l	0.007 J	0.021 J	0.047 J	0.47 J	0.011 J	ND (<1.5)	ND (<1.5)	ND (<15)	ND (<1.5)	ND (<1.5)
Vanadium	24	mg/l	0.0014 J	0.0036 J	ND (<0.015)	ND (<0.38)	0.002 J	ND (<0.15)	0.017 J	ND (<1.5)	ND (<0.15)	0.094 J
Zinc	250	mg/l	1,000	2,200	3,200	41,000	1.6	2,100	0.086 J	60,000	4	26
Analyte	Screening Level	Units										
Total Cyanide	590	mg/l	--	--	--	--	45	--	0.004 J	7.6	1.1	0.66
Amenable Cyanide	30	mg/l	--	--	--	--	26	--	--	--	--	--

**Table 3**  
**Waste Characterization Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-E25-2-3	EDC-E26-1-3	EDC-E26-2-3	EDC-E32-2-3	EDC-E34-1-3	EDC-E35-1-3	EDC-F2-2-3	EDC-F3-2-3	EDC-F11-2-3
Sample Date			08/04/21	08/04/21	08/04/21	09/17/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21
Sample Media			Liquid	Solid	Liquid	Liquid	Solid	Solid	Liquid	Liquid	Liquid
Analyte	Screening Level	Units	pH by Field pH Meter								
pH	<2 OR >12.5	s.u.	11.0	11.0	10.0	0.08	2.0	10.0	7.0	7.0	7.0
Analyte	Screening Level	Units	TCLP Metals by 6010B								
Arsenic	5	mg/l	1.5	0.0087 J	0.68	0.35	--	0.0037 J	ND (<0.03)	ND (<0.03)	ND (<0.03)
Barium	100	mg/l	4.1 J	0.015 J	0.36 J	0.25 J	--	0.088 J	0.31 J	0.26 J	0.79 J
Cadmium	1	mg/l	0.49	0.0044 J	2	1.7	--	0.042	1.3	0.61	9.6
Chromium	5	mg/l	12	0.0085 J	0.076 J	620	--	0.32	0.023 J	0.0043 J	0.022 J
Lead	5	mg/l	6.7	0.014 J	0.7	0.54	--	0.004 J	0.0051 J	ND (<0.015)	ND (<0.015)
Selenium	1	mg/l	0.15 J	ND (<0.03)	0.08 J	ND(<0.03)	--	ND (<0.03)	0.0048 J	0.0024 J	0.0073 J
Silver	5	mg/l	ND (<0.38)	ND (<0.015)	ND (<0.15)	ND(<.015)	--	ND (<0.015)	ND (<0.015)	0.0014 J	0.079
Analyte	Screening Level	Units	TCLP Metals by 7470A								
Mercury	0.2	mg/l	ND (<0.025)	ND (<0.01)	ND (<0.01)	--	--	ND (<0.01)	ND (<0.01)	ND (<0.001)	ND (<0.001)
Analyte	Screening Level	Units	STLC Metals by 6010B								
Antimony	15	mg/l	0.65 J	ND (<0.9)	ND (<0.9)	--	0.39 J	ND (<0.9)	ND (<0.09)	ND (<0.09)	ND (<0.09)
Arsenic	5	mg/l	1.6	ND (<0.3)	0.65	--	ND (<0.3)	ND (<0.3)	ND (<0.03)	ND (<0.03)	ND (<0.03)
Barium	100	mg/l	3.2	0.028 J	0.22 J	--	1.4	ND (<0.3)	0.061	0.047	0.065
Beryllium	0.75	mg/l	ND (<0.38)	ND (<0.15)	ND (<0.15)	--	ND (<0.15)	ND (<0.15)	ND (<0.015)	ND (<0.015)	ND (<0.015)
Cadmium	1	mg/l	0.47	ND (<0.15)	1.9	--	12	0.16	1.3	0.77	9.5
Chromium	5	mg/l	11	0.096 J	0.08 J	--	2.9	5.8	0.00092 J	0.0012 J	0.0076 J
Cobalt	80	mg/l	0.35 J	0.043 J	1.2	--	4.4	2.3	0.16	0.037	0.26
Copper	25	mg/l	5.6	3.2	1.8	--	190	20	0.26	0.1	0.95
Lead	5	mg/l	6.3	ND (<0.15)	0.68	--	38	ND (<0.15)	0.0017 J	ND (<0.015)	ND (<0.015)
Molybdenum	350	mg/l	15	ND (<0.3)	5.8	--	0.16 J	2.5	ND (<0.03)	0.02 J	0.0049 J
Nickel	20	mg/l	5.3	0.04 J	3.4	--	15	0.83	0.48	0.081	0.83
Selenium	1	mg/l	ND (<0.75)	ND (<0.3)	0.03 J	--	ND (<0.3)	ND (<0.3)	0.0026 J	ND (<0.03)	0.0068 J
Silver	5	mg/l	ND (<0.38)	ND (<0.15)	ND (<0.15)	--	0.083 J	ND (<0.15)	ND (<0.015)	0.0014 J	0.074
Thallium	7	mg/l	ND (<3.8)	ND (<1.5)	0.044 J	--	ND (<1.5)	ND (<1.5)	ND (<0.15)	ND (<0.15)	0.0084 J
Vanadium	24	mg/l	1.4	ND (<0.15)	0.18	--	ND (<0.15)	ND (<0.15)	ND (<0.015)	ND (<0.015)	ND (<0.015)
Zinc	250	mg/l	52	52	1,200	--	3,000	78	190	9.3	240
Analyte	Screening Level	Units									
Total Cyanide	590	mg/l	0.018 J	0.76	0.15	--	1.1	11.0	0.28	ND(<0.01)	1.5
Amenable Cyanide	30	mg/l	--	--	--	--	--	--	--	--	--

**Table 3**  
**Waste Characterization Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-F12-2-3	EDC-F13-2-3	EDC-F14-2-3	EDC-F15-2-3	EDC-F15A-2-3	EDC-F17-2-3	EDC-F24-2-3	EDC-FA1-2-3	EDC-FS1-2-3	EDC-FS2-1-3
Sample Date			08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	09/03/21
Sample Media			Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Solid
Analyte	Screening Level	Units	pH by Field pH Meter									
pH	<2 OR >12.5	s.u.	7.0	5.5	2.6	6.0	7.0	1.0	5.0	6.1	9.5	
Analyte	Screening Level	Units	TCLP Metals by 6010B									
Arsenic	5	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.75)	ND (<0.03)	ND (<0.03)	ND (<0.15)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND(<0.030)
Barium	100	mg/l	0.16 J	0.22 J	0.69 J	0.2 J	0.34 J	1.7 J	0.14 J	0.066 J	0.2 J	0.28 J
Cadmium	1	mg/l	0.42	0.66	12	0.76	0.86	42	16	0.0011 J	0.0064 J	0.24 J
Chromium	5	mg/l	0.0021 J	ND (<0.03)	ND (<0.75)	0.015 J	0.013 J	340	0.0046 J	0.0065 J	0.0017 J	0.27
Lead	5	mg/l	ND (<0.015)	ND (<0.015)	0.14 J	0.012 J	0.0097 J	5.4	0.33	ND (<0.015)	ND (<0.015)	0.017
Selenium	1	mg/l	0.0037 J	0.0031 J	0.079 J	0.013 J	0.014 J	ND (<0.15)	0.007 J	0.0024 J	ND (<0.03)	ND(<0.030)
Silver	5	mg/l	0.018	ND (<0.015)	ND (<0.38)	0.0023 J	0.014 J	ND (<0.075)	0.011 J	ND (<0.015)	0.0007 J	ND(<0.015)
Analyte	Screening Level	Units	TCLP Metals by 7470A									
Mercury	0.2	mg/l	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.001)	0.00015 J	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND(<0.010)
Analyte	Screening Level	Units	STLC Metals by 6010B									
Antimony	15	mg/l	ND (<0.09)	ND (<0.09)	ND (<0.09)	ND (<0.09)	ND (<0.09)	ND (<9)	ND (<0.09)	ND (<0.09)	ND (<0.09)	0.07 J
Arsenic	5	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<3)	ND (<0.03)	ND (<0.03)	ND (<0.03)	0.027 J
Barium	100	mg/l	0.059	0.042	0.33	0.057	0.23	1 J	0.063	0.045	0.011 J	0.16 J
Beryllium	0.75	mg/l	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<1.5)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND(<0.15)
Cadmium	1	mg/l	0.44	0.66	22	0.74	0.73	37	15	0.02	0.0026 J	1.4
Chromium	5	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.03)	0.015 J	0.0049 J	340	0.0023 J	0.0055 J	0.0012 J	52
Cobalt	80	mg/l	0.014 J	0.057	0.42	0.086	0.14	3	0.23	ND (<0.015)	0.00091 J	0.3
Copper	25	mg/l	0.57	0.79	0.041	0.058	2.1	380	0.57	0.014 J	0.074	7.7
Lead	5	mg/l	ND (<0.015)	0.0048 J	0.2	0.015	0.015	6.3	2.1	ND (<0.015)	ND (<0.015)	1.5
Molybdenum	350	mg/l	0.29	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<3)	ND (<0.03)	0.0022 J	0.026 J	0.17 J
Nickel	20	mg/l	0.031 J	1.3	2.6	0.43	0.27	51	0.097	0.017 J	0.015 J	8.7
Selenium	1	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.03)	0.01 J	0.0066 J	ND (<3)	0.0047 J	ND (<0.03)	ND (<0.03)	ND(<0.30)
Silver	5	mg/l	0.017	ND (<0.015)	ND (<0.015)	0.0016 J	0.017	ND (<1.5)	0.0095 J	ND (<0.015)	ND (<0.015)	ND(<0.15)
Thallium	7	mg/l	ND (<0.15)	ND (<0.15)	0.096 J	0.0086 J	0.032 J	0.43 J	0.0077 J	ND (<0.15)	ND (<0.15)	ND(<1.5)
Vanadium	24	mg/l	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	0.56 J	ND (<0.015)	ND (<0.015)	ND (<0.015)	0.057 J
Zinc	250	mg/l	5	210	2,200	100	250	44,000	120	2.6	0.13	1,200
Analyte	Screening Level	Units										
Total Cyanide	590	mg/l	--	--	--	--	--	--	--	--	--	9.4
Amenable Cyanide	30	mg/l	--	--	--	--	--	--	--	--	--	7.2

**Table 3**  
**Waste Characterization Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-FS2-2-3	EDC-FS3-2-3	EDC-GBT1-2-3	EDC-S1-2-3 (Asump)	EDC-S2-2-3 (Asump)	EDC-S3-2-3 (Asump)	EDC-T1-1-3
Sample Date			08/04/21	08/04/21	08/05/21	08/03/21	08/03/21	08/03/21	8/4/2021 0
Sample Media			Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Solid
Analyte	Screening Level	Units	pH by Field pH Meter						
pH	<2 OR >12.5	s.u.	8.2	5.0	10.0	9.0	8.0	8.0	10.0
Analyte	Screening Level	Units	TCLP Metals by 6010B						
Arsenic	5	mg/l	ND (<0.03)	ND (<0.03)	0.0019 J	0.0016 J	ND (<0.03)	ND (<0.03)	ND (<0.03)
Barium	100	mg/l	0.38 J	0.42 J	0.16 J	0.1 J	0.063 J	0.06 J	1.5
Cadmium	1	mg/l	0.016	1.6	ND (<0.015)	0.00043 J	0.00045 J	0.001 J	1.6
Chromium	5	mg/l	0.0013 J	0.0014 J	0.024 J	0.0088 J	0.028 J	0.011 J	0.069
Lead	5	mg/l	0.0032 J	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	0.15
Selenium	1	mg/l	0.0035 J	0.0033 J	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	0.0042 J
Silver	5	mg/l	0.0083 J	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)
Analyte	Screening Level	Units	TCLP Metals by 7470A						
Mercury	0.2	mg/l	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.01)	ND (<0.001)	ND (<0.01)	ND (<0.01)
Analyte	Screening Level	Units	STLC Metals by 6010B						
Antimony	15	mg/l	ND (<0.09)	ND (<0.09)	ND (<0.09)	ND (<0.09)	0.0046 J	ND (<0.09)	0.16 J
Arsenic	5	mg/l	ND (<0.03)	ND (<0.03)	ND (<0.03)	0.0022 J	ND (<0.03)	ND (<0.03)	ND (<0.3)
Barium	100	mg/l	0.059	0.13	0.0049 J	0.052	0.0058 J	0.0088 J	0.54
Beryllium	0.75	mg/l	ND (<0.015)	ND (<0.015)	0.00031 J	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.15)
Cadmium	1	mg/l	0.015 J	1.6	0.00065 J	0.00042 J	ND (<0.015)	ND (<0.015)	0.39
Chromium	5	mg/l	ND (<0.03)	0.0087 J	0.023 J	0.0071 J	0.025 J	0.0082 J	4.9
Cobalt	80	mg/l	0.17	0.08	0.0058 J	0.028	0.0058 J	0.003 J	1.4
Copper	25	mg/l	0.02 J	1.1	0.16	0.046	0.02 J	0.0023 J	23
Lead	5	mg/l	0.0026 J	0.0046 J	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	0.14 J
Molybdenum	350	mg/l	ND (<0.03)	ND (<0.03)	0.16	0.011 J	0.013 J	0.0066 J	0.078 J
Nickel	20	mg/l	0.81	0.61	0.013 J	0.021 J	0.0085 J	0.0077 J	0.17 J
Selenium	1	mg/l	0.0022 J	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.3)
Silver	5	mg/l	0.0071 J	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.015)	ND (<0.15)
Thallium	7	mg/l	ND (<0.15)	ND (<0.15)	ND (<0.15)	ND (<0.15)	ND (<0.15)	ND (<0.15)	ND (<1.5)
Vanadium	24	mg/l	ND (<0.015)	ND (<0.015)	ND (<0.015)	0.0022 J	ND (<0.015)	ND (<0.015)	ND (<0.15)
Zinc	250	mg/l	91	240	0.054 J	0.43	0.27	0.12	1.400
Analyte	Screening Level	Units	Cyanide by 335.4						
Total Cyanide	590	mg/l	--	--	0.07	--	--	--	1.000
Amenable Cyanide	30	mg/l	--	--	--	--	--	--	410

Notes:

This table includes sampling results from the removal assessment and the removal action.

**Bold** = Detected above reporting limit

**Bold, Underlined and Highlighted** = Analytical result exceeds screening levels

-- = Not applicable

< = Less than

> = Greater than

ID = Identification

J = Indicates that the concentration is an approximate value because the analyte concentration is below the reporting limit and above the method detection limit

ND = Not detected above the reporting limit (<RL)

mg/l = Milligrams per liter

STLC = Soluble Threshold Limit Concentration

s.u. = Standard units

TCLP = Toxicity Characteristic Leaching Procedure

Screening levels for TCLP Metals and pH are thresholds for characteristic hazardous waste as defined by Resource Conservation and Recovery Act

Screening levels for STLC Metals are thresholds for California hazardous waste as defined by California Code of Regulations Title 22, Chapter 11, Article 3

Screening levels for total and amenable cyanide are based on the land disposal restrictions in 40 CFR Chapter1, Subchapter 1, Part 268.

Table 4  
Total Metals Sampling Results  
E-D Coat, Inc. Time-Critical Removal Action  
Oakland, California

Sample ID	EDC-A1/A1A-1-3	EDC-A4-2-3	EDC-A8/A8A-1-3	EDC-B2-1-3	EDC-B3-1-3	EDC-B4-2-3	EDC-B5-2-3	EDC-B6-1-3	EDC-B7-1-3	EDC-B7A-1-3
Sample Date	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21	08/03/21
Sample Media	Solid	Liquid	Solid	Solid	Solid	Liquid	Liquid	Solid	Solid	Solid
Units	mg/kg	mg/l	mg/kg	mg/kg	mg/kg	mg/l	mg/l	mg/kg	mg/kg	mg/kg
Analyte	Metals by EPA Method 6010B									
Antimony	2.2 J	6.2	6	2.0 J	ND (<2.9)	5.6	7.8	ND (<3.1)	7.6	ND (<2.8)
Arsenic	7.3	ND (<1.0)	0.73 J	ND (<0.96)	ND (<0.97)	ND (<1.0)	ND (<1.0)	ND (<1)	0.75 J	ND (<0.92)
Barium	3.2	0.32 J	1.6	110	2.0	ND (<1.0)	ND (<1.0)	31	1 J	0.3 J
Beryllium	ND (<0.49)	ND (<0.1)	ND (<0.52)	ND (<0.48)	ND (<0.49)	ND (<0.1)	ND (<0.1)	ND (<0.52)	ND (<0.52)	ND (<0.46)
Cadmium	0.22 J	36	0.9	4.9	1.7	1	0.99	4.5	0.49 J	0.28 J
Chromium	24	400	4.7	590	160	890	1,500	870	19	8.6
Cobalt	0.2 J	0.24 J	0.92	17	0.8	ND (<0.5)	1	12	6.3	0.21 J
Copper	280	66	160	2,400	51	97	160	590	20	20
Lead	8	2	4.6	51	20	ND (<1.0)	ND (<1.0)	69	3.4	29
Molybdenum	15	3.2	2.8	3.7	1.8	3	3.2	9.4	2.6	0.68 J
Nickel	3.5	19	5.0	30	5.4	30	27	77	24	1.4
Selenium	2.1 J	ND (<3.0)	ND (<3.1)	ND (<2.9)	ND (<2.9)	ND (<3.0)	ND (<3.0)	ND (<3.1)	ND (<3.1)	ND (<2.8)
Silver	0.78	1.1	0.23 J	130	9.9	0.52	ND (<0.5)	ND (<0.52)	0.4 J	0.58
Thallium	ND (<2.9)	ND (<5.0)	ND (<3.1)	ND (<2.9)	ND (<2.9)	ND (<5.0)	ND (<5.0)	ND (<3.1)	ND (<3.1)	ND (<2.8)
Vanadium	0.49 J	ND (<2.5)	ND (<1)	3.3	ND (<0.97)	0.29 J	ND (<2.5)	5	3.3	ND (<0.92)
Zinc	1,500	100,000	55,000	23,000	10,000	96,000	110,000	7,100	98,000	6,400
Analyte	Mercury by EPA Method 7470A/7471A									
Mercury	ND (<0.16)	0.00016 J	ND (<0.16)	0.094 J	ND (<0.14)	0.00012 J	0.44	0.17	ND (<0.17)	ND (<0.15)



Table 4  
Total Metals Sampling Results  
E-D Coat, Inc. Time-Critical Removal Action  
Oakland, California

Sample ID	EDC-B8-1-3	EDC-B9-2-3	EDC-C3-2-3	EDC-C5-2-3	EDC-C6-2-3	EDC-C18-2-3	EDC-C19-2-3	EDC-C20-2-3	EDC-C21-2-3	EDC-C22-2-3	EDC-CS1-2-3	EDC-CS2-2-3
Sample Date	08/03/21	08/03/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21
Sample Media	Solid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
Units	mg/kg	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Analyte												
Antimony	8.1	ND (<4.0)	ND (<0.4)	ND (<1.0)	ND (<2.0)	0.19 J	ND (<0.4)	ND (<.04)	0.094	0.12	ND (<4.0)	ND (<2.0)
Arsenic	ND (<0.97)	ND (<1.0)	0.49	ND (<0.25)	0.35 J	ND (<0.1)	0.016 J	ND (<.01)	ND (<0.01)	0.0092 J	ND (<1.0)	0.19 J
Barium	27	ND (<1.0)	0.048 J	0.077 J	2.5	0.051 J	0.21	0.0028 J	0.16	0.21	2	4.7
Beryllium	ND (<0.49)	ND (<0.1)	ND (<0.01)	ND (<0.025)	ND (<0.05)	ND (<0.01)	ND (<0.01)	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.1)	ND (<0.05)
Cadmium	6.2	0.77 J	ND (<0.05)	0.43	14	0.12	2.2	ND (<0.005)	5.4	1.2	8.9	14
Chromium	360	86	0.61	41	1,000	6.1	30	0.002 J	0.026	0.062	120	140
Cobalt	18	0.7	ND (<0.05)	0.55	13	0.63	2.3	ND (<0.005)	0.59	1.9	4.3	4.6
Copper	250	1.3	2.2	120	3,600	4.9	7.1	0.17	2.6	5.5	240	210
Lead	270	ND (<1.0)	0.16	11	380	ND (<0.1)	0.39	ND (<0.01)	ND (<0.01)	0.046	3	40
Molybdenum	4.2	ND (<1.0)	13	1.4	34	0.75	0.31	0.092	ND (<0.01)	ND (<0.01)	ND (<1.0)	1.6
Nickel	32	44	0.27	20	460	0.25	26	ND (<0.01)	5.7	8.9	90	94
Selenium	ND (<2.9)	ND (<3.0)	ND (<0.3)	ND (<0.75)	0.32 J	ND (<0.3)	ND (<0.3)	ND (<0.03)	ND (<0.03)	0.089	ND (<3.0)	ND (<1.5)
Silver	18	ND (<0.5)	ND (<0.05)	ND (<0.130)	ND (<0.25)	ND (<0.05)	ND (<.05)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.5)	ND (<0.25)
Thallium	ND (<2.9)	ND (<5.0)	ND (<0.5)	ND (<1.300)	1.9 J	ND (<0.5)	ND (<0.5)	ND (<0.05)	ND (<0.05)	ND (<0.05)	ND (<5.0)	0.4 J
Vanadium	2	ND (<2.0)	ND (<1.3)	0.12 J	2.6	ND (<0.05)	ND (<0.05)	ND (<0.005)	ND (<0.005)	0.0022 J	ND (<0.5)	0.08 J
Zinc	130,000	300	68	110,000	120,000	140	4,100	0.5	1,100	2,100	10,000	26,000
Analyte												
Mercury	ND (<0.14)	ND (<0.002)	ND (<0.004)	ND (<0.0004)	ND (<0.004)	ND (<0.008)	0.001 J	ND (<0.0004)	ND (<0.0004)	ND (<0.0004)	ND (<0.004)	0.003 J



Table 4  
Total Metals Sampling Results  
E-D Coat, Inc. Time-Critical Removal Action  
Oakland, California

Sample ID	EDC-CS3-2-3	EDC-D6-1-3	EDC-E13-2-3	EDC-E16-2-3	EDC-E22-1-3	EDC-E25-1-3	EDC-E25-2-3	EDC-E26-1-3	EDC-E26-2-3	EDC-E32-2-3	EDC-E34-1-3	EDC-E35-1-3
Sample Date	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	09/17/21	08/04/21	08/04/21
Sample Media	Liquid	Solid	Liquid	Liquid	Solid	Solid	Liquid	Solid	Liquid	Liquid	Solid	Solid
Units	mg/l	mg/kg	mg/l	mg/l	mg/kg	mg/kg	mg/l	mg/kg	mg/l	mg/l	mg/kg	mg/kg
Analyte												
Antimony	ND (<4.0)	8.3	0.62	0.094	7.1	9.7	ND (<50)	3.2 J	0.52 J	66	2.3 J	16
Arsenic	0.19 J	ND (<44)	0.13	ND (<0.01)	7.9	2.7	ND (<13)	1.4	0.54	7.9	ND (<0.87)	4.9
Barium	1.4	1.4	ND (<0.1)	.0017	12	310	4.2 J	4.8	0.17 J	27	140	23
Beryllium	ND (<0.1)	ND (<0.44)	ND (<0.01)	ND (<0.001)	ND (<0.47)	ND (<0.43)	ND (<1.3)	ND (<0.54)	ND (<0.02)	0.26 J	ND (<0.43)	ND (<0.52)
Cadmium	9.7	150	ND (<0.05)	3.4	23	100	ND (<6.3)	0.97	1.2	37	31	130
Chromium	69	10	0.061 J	1.5	71	1,100	14	12	0.51	12,000	350	13,000
Cobalt	0.58	8.8 J	ND (<0.05)	0.32	8.9	11	ND (<6.3)	ND (<54)	0.77	130	61	240
Copper	270	770	0.16	4.3	310	670	8.1 J	43	1.3	1,200	2,800	1,200
Lead	7.7	ND (<88)	ND (<0.1)	0.035	83	310	7.5 J	ND (<110)	0.44	23	470	590
Molybdenum	0.37 J	4.6	0.51	0.018	12	18	14	1.5	4.2	220	36	88
Nickel	21	64 J	ND (<0.1)	0.5	31	120	6.6 J	ND (<110)	2.2	7,800	210	280
Selenium	ND (<3.0)	1.8 J	ND (<0.3)	0.058	ND (<2.8)	ND (<2.6)	ND (<38)	ND (<3.3)	ND (<0.6)	ND(<3)	ND (<2.6)	ND (<3.1)
Silver	0.29 J	ND (<0.44)	ND (<0.05)	ND (<0.005)	1.7	10	ND (<6.3)	ND (<0.54)	ND (<0.1)	ND(<0.5)	ND (<0.43)	ND (<0.52)
Thallium	0.47 J	ND (<2.7)	ND (<0.5)	ND (<0.05)	ND (<2.8)	ND (<2.6)	ND (<63)	ND (<3.3)	ND (<1.0)	4.3	ND (<2.6)	ND (<3.1)
Vanadium	0.13 J	4	ND (<0.05)	ND (<2.5)	2.1	12	1.6 J	0.76 J	ND (<2.0)	37	9.3	26
Zinc	1,300	120,000	0.33 J	53,000	7,700	28,000	59	21,000	960	2,100	46,000	83,000
Analyte												
Mercury	ND (<0.004)	ND (<0.15)	ND (<0.004)	ND (<0.0004)	ND (<0.15)	0.054 J	ND (<0.0004)	ND (<0.14)	0.0036 J	--	ND (<0.14)	0.056 J

Table 4  
Total Metals Sampling Results  
E-D Coat, Inc. Time-Critical Removal Action  
Oakland, California

Sample ID	EDC-F2-2-3	EDC-F3-2-3	EDC-F9-2-3	EDC-F11-2-3	EDC-F12-2-3	EDC-F13-2-3	EDC-F14-2-3	EDC-F15-2-3	EDC-F15A-2-3	EDC-F17-2-3	EDC-F24-2-3	EDC-FA1-2-3
Sample Date	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21	08/04/21
Sample Media	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Analyte												
Antimony	0.079	0.069	0.82 J	0.18 J	0.39 J	ND (<2.0)	ND (<2.0)	0.027 J	0.051	5.2	0.035 J	ND (<0.04)
Arsenic	ND (<0.01)	ND (<0.01)	0.14 J	0.052 J	ND (<0.1)	ND (<0.5)	ND (<0.5)	ND (<0.01)	ND (<0.01)	ND (<1.0)	ND (<0.01)	ND (<0.01)
Barium	0.11 J	0.099	1.5	0.61	0.44	0.25 J	1.3	0.064	0.44	1.3	0.069	0.045
Beryllium	ND (<0.001)	ND (<0.001)	ND (<0.025)	ND (<0.025)	ND (<0.01)	ND (<0.05)	ND (<0.05)	ND (<.001)	ND (<0.001)	ND (<0.1)	ND (<0.001)	ND (<0.001)
Cadmium	0.85	1.1	50	8.1	3.3	0.65	19	0.77	0.41	33	15	0.019
Chromium	11	2.9	350	45	58	9.1	28	0.055	0.56	270	0.04	0.0047 J
Cobalt	0.18	0.19	5.2	0.54	1.6	0.049 J	0.83	0.087	0.12	2.7	0.24	ND (<0.005)
Copper	2.9	3.7	59	28	21	27	29	0.067	1.4	350	0.81	0.025
Lead	0.31	0.13	9.6	2.8	2.3	0.83	6.5	0.0074 J	0.04	3.9	3.7	ND (<0.01)
Molybdenum	0.06	0.04	1	0.4	0.57	0.13 J	ND (<0.5)	ND (<0.01)	0.0073 J	0.96 J	0.0086 J	ND (<0.01)
Nickel	1.4	0.97	42	3.6	8.3	1.6	6.4	0.44	0.27	40	0.1	0.017
Selenium	0.0029 J	ND (<0.03)	ND (<0.75)	ND (<0.75)	ND (<0.3)	ND (<1.5)	ND (<1.5)	0.0095 J	0.032	ND (<3.0)	0.0053 J	ND (<0.03)
Silver	0.0038 J	0.011	0.13	0.096 J	0.057	ND (<0.25)	0.21 J	0.032	0.06	0.8	0.025	ND (<0.005)
Thallium	ND (<0.05)	ND (<0.05)	0.15 J	ND (<1.3)	ND (<0.5)	ND (<2.5)	0.21 J	ND (<0.05)	ND (<0.05)	ND (<5.0)	ND (<0.05)	ND (<0.05)
Vanadium	0.018	ND (<0.1)	0.2	0.1 J	ND (<2.5)	ND (<0.25)	ND (<0.25)	ND (<0.005)	ND (<0.1)	ND (<5.0)	0.0013 J	ND (<0.005)
Zinc	420	280	9,400	800	1,800	240	5,400	110	260	53,000	140	2.4
Analyte												
Mercury	0.0032 J	0.0002 J	0.0015	0.0013	0.0018	ND (<0.0004)	ND (<0.0004)	ND (<0.0004)	0.00012 J	0.00055 J	0.00012 J	ND (<0.0004)

Table 4  
Total Metals Sampling Results  
E-D Coat, Inc. Time-Critical Removal Action  
Oakland, California

Sample ID	EDC-FS1-2-3	EDC-FS2-2-3	EDC-FS3-2-3	EDC-GBT1-2-3	EDC-S1-2-3 (Asump)	EDC-S2-2-3 (Asump)	EDC-S3-2-3 (Asump)	EDC-T1-1-3
Sample Date	08/04/21	08/04/21	08/04/21	08/05/21	08/03/21	08/03/21	08/03/21	8/4/2021 0
Sample Media	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Solid
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/kg
Analyte	Total Metals by EPA Method 6010 B							
Antimony	ND (<0.04)	ND (<0.04)	<b>0.036 J</b>	ND (<0.04)	<b>0.02 J</b>	ND (<0.04)	ND (<0.04)	<b>14</b>
Arsenic	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	<b>3.7</b>
Barium	<b>0.015</b>	<b>0.027</b>	<b>0.15</b>	<b>0.0051 J</b>	<b>0.052</b>	<b>0.0058 J</b>	<b>0.011</b>	<b>76</b>
Beryllium	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.49)
Cadmium	<b>0.013</b>	<b>0.013</b>	<b>1.5</b>	<b>0.0052</b>	ND (<0.005)	ND (<0.005)	ND (<0.005)	<b>65</b>
Chromium	<b>0.048</b>	<b>0.014</b>	<b>0.04</b>	<b>0.021</b>	<b>0.057</b>	<b>0.046</b>	<b>0.029</b>	<b>5,400</b>
Cobalt	<b>0.0035 J</b>	<b>0.015</b>	<b>0.074</b>	<b>0.005</b>	<b>0.023</b>	<b>0.0044 J</b>	<b>0.0029 J</b>	<b>120</b>
Copper	<b>0.11</b>	<b>0.048</b>	<b>1.2</b>	<b>0.18</b>	<b>0.066</b>	<b>0.035</b>	<b>0.031</b>	<b>680</b>
Lead	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	<b>940</b>
Molybdenum	<b>0.023</b>	<b>0.011 J</b>	ND (<0.5)	<b>0.15</b>	<b>0.0095 J</b>	<b>0.017</b>	ND (<0.01)	<b>10</b>
Nickel	<b>0.027</b>	<b>0.066</b>	<b>0.6</b>	<b>0.017</b>	<b>0.019</b>	<b>0.0084 J</b>	<b>0.0075 J</b>	<b>22</b>
Selenium	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<0.03)	ND (<2.9)
Silver	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.005)	ND (<0.005)	<b>130</b>
Thallium	ND (<0.05)	ND (<0.05)	ND (<0.05)	ND (<0.05)	ND (<0.05)	ND (<0.05)	ND (<0.05)	ND (<2.9)
Vanadium	ND (<0.005)	ND (<0.05)	ND (<0.25)	ND (<0.005)	<b>0.0025 J</b>	ND (<0.005)	<b>0.0018 J</b>	<b>8.4</b>
Zinc	<b>1.7</b>	<b>7.3</b>	<b>270</b>	<b>0.074</b>	<b>1.6 J</b>	<b>0.69 J</b>	<b>1.4</b>	<b>200,000</b>
Analyte	Total Mercury by EPA Method 7470A							
Mercury	ND (<0.0004)	ND (<0.0004)	ND (<0.0004)	ND (<0.0004)	ND (<0.004)	<b>0.00013 J</b>	ND (<0.0004)	<b>0.13 J</b>

Notes:

This table includes sampling results from the removal assessment and the removal action.

**Bold** = Detected above reporting limit

**Bold, Underlined and Highlighted** = Analytical result exceeds screening levels

-- = Not applicable

ID = Identification

mg/L = Micrograms per liter

mg/kg = Micrograms per kilogram

EPA = United States Environmental Protection Agency

ND = Not detected above the reporting limit (<RL)

J = Indicates that the concentration is an approximate value because the analyte concentration is below the reporting limit and above the method

**Table 5**  
**Liquid Hazardous and Non-Hazardous Waste Disposal Summary**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Waste Description	Disposal	Profile #	Date	Manifest #	Line#	Container Quantity	Container Type	Disposal Volume	Units	Disposal Weight	Units
Non-Hazardous Wastewater	Non-Hazardous	070308611-0	9/7/2021	016145731FLE	1	1	Tanker Truck	4,801	Gal	20.02	Tons
Non-Hazardous Wastewater	Non-Hazardous	070308611-0	9/7/2021	016145732FLE	1	1	Tanker Truck	3,650	Gal	15.83	Tons
RCRA Wastewater	Hazardous	070308606-0	9/9/2021	016145750FLE	1	1	Tanker Truck	3,425	Gal	15.28	Tons
Non-Hazardous Wastewater	Non-Hazardous	070308611-0	9/9/2021	016145736FLE	1	1	Tanker Truck	3,586	Gal	15.55	Tons
Non-Hazardous Wastewater	Non-Hazardous	070308611-0	9/9/2021	016145735FLE	1	1	Tanker Truck	4,782	Gal	20.34	Tons
RCRA Wastewater	Hazardous	070308606-0	9/14/2021	016145746FLE	1	1	Tanker Truck	4,288	Gal	18.24	Tons
Non-Hazardous Wastewater	Non-Hazardous	070308611-0	9/14/2021	016145737FLE	1	1	Tanker Truck	3,013	Gal	12.94	Tons
RCRA Wastewater	Hazardous	070308606-0	9/16/2021	016145747FLE	1	1	Tanker Truck	3,763	Gal	15.69	Tons
Non-Hazardous Wastewater	Non-Hazardous	070308611-0	9/16/2021	016145738FLE	1	1	Tanker Truck	3,667	Gal	15.75	Tons
Non-Hazardous Wastewater	Non-Hazardous	070308611-0	9/16/2021	016145739FLE	1	1	Tanker Truck	4,540	Gal	18.93	Tons
RCRA Wastewater	Hazardous	070308606-0	9/21/2021	016145748FLE	1	1	Tanker Truck	3,380	Gal	15.08	Tons
Inorganic Acid Liquids	Hazardous	070308645-0	9/22/2021	016145752FLE	1	1	Tanker Truck	3,724	Gal	20.19	Tons
Inorganic Alkaline Liquids	Hazardous	070309247-1	9/28/2021	016145766FLE	1	1	Tanker Truck	3,255	Gal	15.2	Tons
Inorganic Acid Liquids	Hazardous	070308645-0	9/30/2021	016147950FLE	1	1	Tanker Truck	2,843	Gal	15.77	Tons
RCRA Wastewater	Hazardous	070308606-0	10/15/2021	016145749FLE	1	1	Tanker Truck	2,942	Gal	13.37	Tons
RCRA Wastewater	Hazardous	070308606-0	10/16/2021	016145740FLE	1	1	Tanker Truck	3,500	Gal	16.7	Tons
RCRA Wastewater	Hazardous	070308606-0	10/20/2021	016145745FLE	1	1	Tanker Truck	2,244	Gal	9.64	Tons
RCRA Wastewater	Hazardous	070308606-0	10/21/2021	016145741FLE	1	1	Tanker Truck	2,100	Gal	8.12	Tons
RCRA Wastewater	Hazardous	070308606-0	10/27/2021	016145742FLE	1	1	Tanker Truck	3,878	Gal	16.17	Tons
Chromic Acid Solution	Hazardous	070137709-11326	10/27/2021	016145852FLE	1	3	T275	750*	Gal	4.16*	Tons
Sulfuric Acid Solution	Hazardous	070137709-11327	10/27/2021	016145852FLE	2	4	T275	1000*	Gal	5.55*	Tons
Inorganic Acid Liquids	Hazardous	070308645-0	10/27/2021	016145901FLE	4	1	T275	200*	Gal	1.11*	Tons
RCRA Wastewater	Hazardous	070308606-0	10/29/2021	016145743FLE	1	1	Tanker Truck	3,588	Gal	14.96	Tons
Bulk - Class 9 Organic Liquids Non-Hazardous	Non-Hazardous	070131570-25893	11/2/2021	016146111FLE	18	1	DF55	55*	Gal	0.23*	Tons
Chromic Acid Solution	Hazardous	070137709-11326	11/2/2021	016146111FLE	6	1	DF55	110*	Gal	0.61*	Tons
Disposal, Sulfuric Acid Solution	Hazardous	070137709-11327	11/2/2021	016146111FLE	7	3	DF55	150*	Gal	0.83*	Tons
Waste Nitric Acid	Hazardous	070137709-11328	11/2/2021	016146111FLE	2	1	DF55	55*	Gal	0.31*	Tons
Ammonium Hydroxide Solution	Hazardous	070137710-21678	11/2/2021	016146111FLE	20	1	DF55	55*	Gal	0.20*	Tons
Alkaline Liquid	Hazardous	070137711-8478	11/2/2021	016146111FLE	4	2	OP 95	110*	Gal	0.51*	Tons
Alkaline Liquid	Hazardous	070137711-8478	11/2/2021	016146111FLE	12	2	DF55	110*	Gal	0.51*	Tons
Bulk - Class 9 Inorganic Liquid with Metals	Non-Hazardous	070137750-11420	11/2/2021	016146111FLE	17	1	DF55	55*	Gal	0.23*	Tons

**Table 5**  
**Liquid Hazardous and Non-Hazardous Waste Disposal Summary**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Waste Description	Disposal	Profile #	Date	Manifest #	Line#	Container Quantity	Container Type	Disposal Volume	Units	Disposal Weight	Units
Bulk - Class 9 Inorganic Liquid with Metals	Non-Hazardous	070137750-11420	11/2/2021	016146113FLE	17	4	DF55	220*	Gal	0.94*	Tons
Oxidizing Acid	Hazardous	070182262-18	11/2/2021	016146111FLE	9	1	T275	250*	Gal	1.39*	Tons
Oxidizing Acid	Hazardous	070182262-18	11/2/2021	016146111FLE	10	2	DF55	110*	Gal	0.61*	Tons
Sulfuric Acid, Oxidizing	Hazardous	070183432-69	11/2/2021	016146111FLE	11	2	OP 95	110*	Gal	0.61*	Tons
RCRA Wastewater	Hazardous	070308606-0	11/2/2021	016146111FLE	3	3	T275	810*	Gal	3.45*	Tons
Inorganic Acid Liquids	Hazardous	070308645-0	11/2/2021	016146111FLE	1	1	DF55	55*	Gal	0.31*	Tons
RCRA Wastewater	Hazardous	070308606-0	11/3/2021	016146110FLE	1	1	Tanker Truck	3,854	Gal	16.07	Tons
<b>Total Hazardous</b>								<b>50,657*</b>	<b>Gal</b>	<b>230.13*</b>	<b>Tons</b>
<b>Total Non-Hazardous</b>								<b>28,368*</b>	<b>Gal</b>	<b>120.76*</b>	<b>Tons</b>

Notes:

-- = Not available

\* = Estimated value

Some weights are estimated based on calculated densities of similar wastes.

DF55 = 55-gallon polyethylene drum

Gal = Gallons

OP 95 = 95-gallon polyethylene overpack drum

T275 = 275-gallon polyethylene tote

USE Beatty, NV = US Ecology disposal facility in Beatty, Nevada

**Table 6**  
**Solid Hazardous Waste Disposal Summary**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Waste Description	Disposal	Profile #	Facility	Date	Manifest #	Line#	Container Quantity	Container Type	Disposal Volume	Units	Disposal Weight	Units
Alkaline Solids	Hazardous	070308934-0	USE Beatty, NV	9/29/2021	016147946FLE	1	22	CYB	3	CY	2.8*	Tons
Acid Solids	Hazardous	070128303-14542	USE Beatty, NV	10/4/2021	016147943FLE	2	3	CYB	1	CY	1.0*	Tons
Alkaline Solids	Hazardous	070308934-0	USE Beatty, NV	10/4/2021	016147943FLE	1	19	CYB	7	CY	6.8*	Tons
Acid Solids	Hazardous	070128303-14542	USE Beatty, NV	10/6/2021	016147948FLE	2	1	CYB	22	CY	19.5	Tons
Alkaline Solids	Hazardous	070308934-0	USE Beatty, NV	10/6/2021	016147948FLE	1	21	CYB	19	CY	18.0*	Tons
Alkaline Solids	Hazardous	070308934-0	USE Beatty, NV	10/8/2021	016145897FLE	1	22	CYB	21	CY	20.3*	Tons
Alkaline Solids	Hazardous	070308934-0	USE Beatty, NV	10/14/2021	016145899FLE	1	22	CYB	22	CY	21.08	Tons
Alkaline Solids	Hazardous	070308934-0	USE Beatty, NV	10/25/2021	016145986FLE	1	22	CYB	22	CY	18.97	Tons
Acid Solids	Hazardous	070128303-14542	USE Beatty, NV	10/27/2021	016145901FLE	2	7	CYB	22	CY	21.57	Tons
Alkaline Solids	Hazardous	070308934-0	USE Beatty, NV	10/27/2021	016145901FLE	1	4	CYB	4	CY	3.9*	Tons
Zinc Anode Balls	Hazardous	070128300-16260	USE Beatty, NV	11/2/2021	016146113FLE	8	2	DF5	10*	Gal	20*	lbs
RCRA Solids Filter Cake	Hazardous	070128302-8793	USE Beatty, NV	11/2/2021	016146111FLE	34	3	DM55	165*	lbs	1200*	lbs
RCRA Solids Filter Cake	Hazardous	070128302-8793	USE Beatty, NV	10/27/2021	016145901FLE	3	1	CYB	1	CY	1500*	lbs
Acid Solids, RCRA metals	Hazardous	070128303-14542	USE Beatty, NV	11/2/2021	016146111FLE	5	2	DF55	110*	Gal	800*	lbs
Waste Cadmium Compounds	Hazardous	070128303-14569	USE Beatty, NV	11/2/2021	016146113FLE	13	1	DF55	55*	Gal	400*	lbs
Used Zinc Anode Balls and Cadmium Balls	Hazardous	070128303-14582	USE Beatty, NV	11/2/2021	016146113FLE	12	16	DF5	80*	Gal	800*	lbs
Waste Ammonium Nitrate Fertilizer	Hazardous	070137702-306	USE Beatty, NV	11/2/2021	016146111FLE	16	1	DF55	55*	Gal	400*	lbs
Oxidizing Alkaline Stripper Solid (Sodium Chlorite)	Hazardous	070137703-229	USE Beatty, NV	11/2/2021	016146111FLE	14	1	DF55	55*	Gal	400*	lbs
Chromate Solids	Hazardous	070183427-169	USE Beatty, NV	11/2/2021	016146111FLE	13	1	DF14	14*	Gal	200*	lbs
Chromate Solids	Hazardous	070183427-169	USE Beatty, NV	11/2/2021	016146111FLE	15	3	DF55	165*	Gal	1200*	lbs
Trench Solids with Cyanide	Hazardous	070186606-96	USE Beatty, NV	11/2/2021	016146113FLE	19	1	DM55	55*	Gal	450*	lbs
<b>Total</b>									<b>147.8*</b>	<b>CY</b>	<b>138.6*</b>	<b>Tons</b>

Notes:

-- = Not available

\* = Estimated value

CY = Cubic yards

CYB = Cubic yard box

DF5 = 5-gallon polyethylene bucket

DF14 = 14-gallon polyethylene drum

DF55 = 55-gallon polyethylene drum

DM55 = 55-gallon metal drum

Gal = Gallons

lbs = Pounds

USE Beatty, NV = US Ecology disposal facility in Beatty, Nevada

**Table 7**  
**RCRA Debris Disposal Summary**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Waste Description	Disposal	Profile #	Container Volume	Container Type	Facility	Date	Manifest #	Disposal Volume (CY)	Disposal Weight (Tons)
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/8/2021	016145733FLE	15.00	3.18
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/8/2021	016145734FLE	12.00	2.53
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/9/2021	016145814FLE	17.00	2.64
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/9/2021	016145814FLE	16.00	2.63
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/9/2021	016145815FLE	12.50	3.245
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/9/2021	016145815FLE	12.50	3.245
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/13/2021	016145768FLE	12.50	4.03
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/13/2021	016145768FLE	12.50	4.03
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/15/2021	016145769FLE	10.50	3.23
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/15/2021	016145769FLE	10.50	3.23
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/16/2021	016145770FLE	10.50	3.40
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/16/2021	016145770FLE	10.50	3.40
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/20/2021	016145771FLE	13.00	3.96
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/20/2021	016145771FLE	13.00	3.96
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/22/2021	016145780FLE	5.50	4.39
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/22/2021	016145780FLE	5.50	4.40
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/23/2021	016145772FLE	10.00	3.65
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/23/2021	016145772FLE	10.00	3.65
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/24/2021	016145776FLE	10.50	3.23
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/24/2021	016145776FLE	10.50	3.22
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/27/2021	016145778FLE	12.00	3.57
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/27/2021	016145778FLE	12.00	3.57
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/28/2021	016145779FLE	10.50	2.44
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/28/2021	016145779FLE	10.50	2.44
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/29/2021	016145781FLE	15.00	3.635
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/29/2021	016145781FLE	15.00	3.635
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/29/2021	016145788FLE	15.00	5.68
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/29/2021	016145788FLE	15.00	5.68
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/30/2021	016145782FLE	18.00	4.065
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	9/30/2021	016145782FLE	18.00	4.065
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/1/2021	016145784FLE	11.00	3.87
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/1/2021	016145784FLE	11.00	3.87
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/1/2021	016145785FLE	15.00	3.98
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/1/2021	016145785FLE	15.00	3.98
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/4/2021	016145786FLE	20.00	3.465

**Table 7**  
**RCRA Debris Disposal Summary**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Waste Description	Disposal	Profile #	Container Volume	Container Type	Facility	Date	Manifest #	Disposal Volume (CY)	Disposal Weight (Tons)
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/4/2021	016145786FLE	20.00	3.465
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/5/2021	016145790FLE	13.50	5.21
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/5/2021	016145791FLE	15.00	5.08
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/6/2021	016145787FLE	15.00	4.29
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/6/2021	016145787FLE	15.00	4.29
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/7/2021	016145789FLE	15.00	5.81
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/7/2021	016145789FLE	15.00	5.81
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/8/2021	016145792FLE	15.00	4.075
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/8/2021	016145790FLE	13.50	5.210
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/12/2021	016145792FLE	15.00	4.075
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/12/2021	016145791FLE	15.00	5.080
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/13/2021	016145793FLE	11.00	3.46
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/13/2021	016145793FLE	11.00	3.46
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/14/2021	016145794FLE	10.50	3.77
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/14/2021	016145797FLE	10.50	3.595
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/15/2021	016145797FLE	10.50	3.595
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/15/2021	016145794FLE	10.50	3.77
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/18/2021	016145795FLE	13.00	2.855
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/18/2021	016145795FLE	13.00	2.855
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/19/2021	016145796FLE	12.00	4.88
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/19/2021	016145796FLE	12.00	4.88
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/22/2021	016145798FLE	12.50	4.26
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/22/2021	016145798FLE	12.50	4.26
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/26/2021	016145802FLE	12.50	4.80
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/26/2021	016145802FLE	12.50	4.80
RCRA Debris	Hazardous	070308688-0	20	ROB	USE Beatty, NV	10/27/2021	016145801FLE	15.00	5.28
<b>Total</b>								<b>789.00</b>	<b>240.08</b>

Notes:

RCRA = Resource Conservation and Recovery Act

ROB = Roll-off box

USE Beatty, NV = US Ecology disposal facility in Beatty, Nevada



**Table 8**  
**ACM Disposal Summary**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Waste Description	Container Type	Facility	Date	Manifest #	Line#	Disposal Volume
Asbestos	Van	Altamont Landfill	9/28/2021	006467556GBF	1	1 CY

Note:

CY = Cubic yard

**Table 9**  
**Lab Pack Disposal Summary**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Waste Description	Disposal	Profile #	Facility	Date	Manifest #	Line#	Container Quantity	Lab Pack Container	Disposal Volume	Units	Disposal Weight	Units
Class 9 Labpack Non-RCRA, Liquid	Non-Hazardous	070131570-25892	USE Beatty, NV	11/2/2021	016146111FLE	30	1	DF55	9	Gal	76.6*	lbs
Class 9 Labpack Non-RCRA, Liquid	Non-Hazardous	070131570-25892	USE Beatty, NV	11/2/2021	016146111FLE	31	1	DF55	13.5	Gal	114.9*	lbs
Oxidizer Labpack, Solid	Hazardous	070137702-307	USE Beatty, NV	11/2/2021	016146111FLE	29	1	DF55	5.5	Gal	46.8*	lbs
Acid Labpack, Liquid	Hazardous	070137709-11346	USE Beatty, NV	11/2/2021	016146111FLE	25	1	DF55	5.5	Gal	46.8*	lbs
Acid Labpack, Liquid	Hazardous	070137709-11346	USE Beatty, NV	11/2/2021	016146111FLE	26	1	DF55	7.5	Gal	63.8*	lbs
Basic Lab Pack, Liquid	Hazardous	070137710-21692	USE Beatty, NV	11/2/2021	016146111FLE	21	1	DF55	9	Gal	76.6*	lbs
Basic Lab Pack, Liquid	Hazardous	070137710-21692	USE Beatty, NV	11/2/2021	016146111FLE	22	1	DF14	2	Gal	17.0*	lbs
Waste Corrosive, Oxidizing Liquids Lab Pack	Hazardous	070182256-49	USE Beatty, NV	11/2/2021	016146111FLE	23	1	DF14	2.5	Gal	21.3*	lbs
Waste Corrosive, Oxidizing Liquids Lab Pack	Hazardous	070182256-49	USE Beatty, NV	11/2/2021	016146111FLE	24	3	DF55	24.5	Gal	208.4*	lbs
Hydrogen Peroxide Labpack, Liquid	Hazardous	070182337-238	USE Beatty, NV	11/2/2021	016146111FLE	28	1	DF55	12	Gal	102.1*	lbs
Waste Flammable Liquids Labpack	Hazardous	070310371-0	USE Beatty, NV	11/2/2021	016146113FLE	32	2	DF55	20.85	Gal	177.4*	lbs
Hydrofluoric Acid Labpack, Liquid	Hazardous	070310382-0	USE Beatty, NV	11/2/2021	016146111FLE	27	4	DF5	6	Gal	51.0*	lbs
Waste Zinc Dust Lab Pack, Solid	Hazardous	070310452-0	USE Beatty, NV	11/2/2021	016145927FLE	1	1	DF14	0.5*	Gal	20.0*	lbs
<b>Total</b>									<b>118.4*</b>	<b>Gal</b>	<b>1022.7*</b>	<b>lbs</b>

Notes:

\* = Estimated value

Disposal quantity is the total volume of material in the containers within the lab pack.

'DF5 = 5-gallon polyethylene bucket

DF14 = 14-gallon polyethylene drum

DF55 = 55-gallon polyethylene drum

Gal = Gallons

lbs = Pounds

RCRA = Resource Conservation and Recovery Act

USE Beatty, NV = US Ecology disposal facility in Beatty, Nevada

117.85

**Table 10**  
**Particulate Monitoring Results in Air**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Date	Start Time	Test Length	Total TWA (mg/m <sup>3</sup> )	Maximum Reading (mg/m <sup>3</sup> )	Time at Maximum Reading	Instrument Number	Location (Plating Line)
09/04/2021	8:17	8:45	0.269	4.76	10:01	8533142107	E
09/06/2021	7:56	9:14	0.15	2.49	16:43	8533192301	C
09/07/2021	11:23	5:47	0.087	2.02	15:20	8533192301	A
09/08/2021	8:19	8:55	0.099	2.03	8:31	8533192301	C
09/09/2021	8:15	8:59	0.604	21.8	16:12	8533142107	E
09/09/2021	8:11	9:04	0.054	1.43	16:42	8533192301	A
09/10/2021	8:13	8:59	0.519	16.3	16:30	8533142107	F
09/10/2021	8:10	9:00	0.048	1.29	16:05	8533192301	C
09/11/2021	7:43	9:01	0.742	11.6	7:51	8533142107	E
09/11/2021	7:41	8:57	0.062	1.44	15:27	8533192301	A
09/13/2021	8:51	8:25	1.97	26.4	15:26	8533142107	F
09/13/2021	8:50	8:29	0.112	1.68	17:11	8533192301	C
09/14/2021	8:07	9:33	0.711	20	9:00	8533142107	E
09/14/2021	8:06	9:36	0.09	1.01	13:31	8533192301	A
09/15/2021	8:54	8:32	0.801	36.2	15:45	8533142107	F
09/15/2021	8:50	8:33	0.095	1.37	8:57	8533192301	C
09/16/2021	8:23	8:43	0.507	11.6	16:28	8533142107	E
09/16/2021	8:20	8:56	0.065	1.49	15:46	8533192301	A
09/17/2021	7:36	9:39	0.402	3.32	14:20	8533142107	E
09/17/2021	7:33	9:40	0.067	1.18	8:15	8533192301	C
09/18/2021	8:11	8:34	0.956	11.9	15:52	8533142107	F
09/18/2021	8:11	8:33	0.047	0.624	10:27	8533192301	A
09/20/2021	8:51	8:29	0.674	16.6	16:56	8533142107	E
09/20/2021	8:51	8:29	0.042	0.875	14:07	8533192301	C
09/21/2021	8:08	9:03	0.331	2.53	15:37	8533142107	F
09/21/2021	8:06	9:06	0.107	1.38	15:14	8533192301	A
09/21/2021	8:10	8:18	0.52	1.54	16:16	8533161711	F
09/22/2021	7:39	9:17	0.732	21.4	9:26	8533142107	E

**Table 10**  
**Particulate Monitoring Results in Air**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Date	Start Time	Test Length	Total TWA (mg/m <sup>3</sup> )	Maximum Reading (mg/m <sup>3</sup> )	Time at Maximum Reading	Instrument Number	Location (Plating Line)
09/22/2021	7:38	9:20	0.151	3.63	9:54	8533192301	A
09/22/2021	7:42	9:14	1.64	14.2	9:29	8533161711	E
09/23/2021	8:16	8:45	0.154	2.05	13:42	8533142107	F
09/23/2021	8:16	8:53	0.066	0.451	12:21	8533192301	F
09/23/2021	8:19	8:54	0.631	5.83	9:58	8533161711	F
09/24/2021	7:35	9:35	0.604	4.61	7:36	8533142107	E
09/24/2021	7:33	9:36	0.082	1.52	10:58	8533192301	A
09/24/2021	7:39	9:36	0.639	17.2	17:00	8533161711	E
09/25/2021	8:40	8:19	0.133	2.72	13:31	8533192301	E
09/25/2021	8:43	8:12	1.06	14.2	16:11	8533161711	F
09/27/2021	8:02	9:13	0.02	0.956	16:41	8533192301	F
09/27/2021	8:04	9:15	0.972	15.5	17:19	8533161711	E
09/28/2021	8:57	8:11	0.078	0.696	16:50	8533192301	A
09/28/2021	8:47	8:25	0.973	9.12	14:31	8533161711	F
09/29/2021	8:04	8:59	0.136	5.61	17:02	8533192301	E
09/29/2021	7:59	8:56	0.733	13.6	16:53	8533161711	E
09/30/2021	8:18	8:32	0.253	2.52	16:50	8533192301	F
09/30/2021	8:16	8:57	0.812	46.8	16:31	8533161711	F
10/01/2021	8:14	8:51	0.246	8.78	16:24	8533192301	E
10/01/2021	8:11	8:49	0.649	4.48	10:18	8533161711	C
10/04/2021	16:03	0:44	0.146	6.39	16:20	8533192301	F
10/04/2021	8:21	8:21	0.118	2.88	16:42	8533161711	E
10/05/2021	7:35	9:33	0.411	7.05	7:36	8533192301	E
10/05/2021	7:39	9:36	0.291	1.66	14:02	8533161711	F
10/06/2021	8:03	9:02	0.494	7.51	15:03	8533192301	F
10/06/2021	8:08	9:06	0.176	12.1	16:45	8533161711	C
10/07/2021	8:01	9:04	0.774	20.3	10:20	8533192301	E
10/07/2021	8:04	9:06	0.341	4.33	17:10	8533161711	E

**Table 10**  
**Particulate Monitoring Results in Air**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Date	Start Time	Test Length	Total TWA (mg/m <sup>3</sup> )	Maximum Reading (mg/m <sup>3</sup> )	Time at Maximum Reading	Instrument Number	Location (Plating Line)
10/08/2021	7:52	9:08	0.91	29.4	8:00	8533192301	F
10/08/2021	8:00	9:10	0.205	7.22	14:43	8533161711	F
10/09/2021	7:44	8:15	0.41	12.8	13:51	8533161711	C
10/11/2021	7:53	9:19	0.059	2.09	17:07	8533163103	F
10/11/2021	7:55	9:01	0.874	10.3	16:41	8533161711	E
10/12/2021	7:56	9:25	0.094	3.21	15:31	8533163103	C
10/12/2021	7:59	9:15	1.14	28	16:46	8533192301	F
10/12/2021	10:08	7:10	0.141	16.9	17:18	8533161711	F
10/13/2021	8:12	9:04	0.05	1.47	14:02	8533163103	F
10/13/2021	8:16	8:54	0.376	4.98	8:17	8533192301	E
10/13/2021	8:14	8:58	0.372	26.3	9:53	8533161711	C
10/14/2021	7:50	9:23	0.095	2.88	9:15	8533163103	C
10/14/2021	7:51	9:19	0.443	12.7	9:45	8533192301	E
10/15/2021	8:50	8:01	0.051	0.621	15:25	8533163103	F
10/15/2021	8:55	7:57	0.231	2.47	8:56	8533192301	E
10/16/2021	8:35	8:35	0.175	4.21	15:32	8533163103	A
10/16/2021	8:28	8:40	0.46	9.53	8:29	8533192301	E
10/18/2021	7:33	9:40	0.061	12.7	7:34	8533161711	E
10/19/2021	7:51	23:21	0	4.09	11:38	8533161711	F
10/20/2021	7:28	9:39	0.065	2.42	7:39	8533161711	C
10/21/2021	7:40	9:07	0.038	1.78	7:41	8533161711	F
10/22/2021	8:03	8:25	0.011	1.99	16:28	8533161711	C

Notes:

DustTrack Number corresponds to the seventh digit in sample identification nomenclature; e.g. EDC-AM-M2-090821 is co-located with DustTrack number 2 on 09/08/2021.

Total particulate data collected using TSI DustTrak DRX Aerosol Monitor 8533

TWA = Time-weighted average

mg/m<sup>3</sup> = Milligrams per cubic meter

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-M1 090221	EDC-AM-M1 090421	EDC-AM-M2 090621	EDC-AM-M2 090721	EDC-AM-M2 090821	EDC-AM-M1 090921	EDC-AM-M2 090921	EDC-AM-M1 091021	EDC-AM-M2 091021
Sample Date			09/02/2021	09/04/2021	09/06/2021	09/07/2021	09/08/2021	09/09/2021	09/09/2021	09/10/2021	09/10/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m³	ND (<2)	ND (<1.4)	ND (<1.5)	ND (<1.9)	ND (<1.4)	ND (<1.4)	ND (<1.4)	ND (<1.4)	ND (<1.4)
Arsenic	10	µg/m³	ND (<0.66)	ND (<0.47)	ND (<0.5)	ND (<0.63)	ND (<0.48)	ND (<0.46)	ND (<0.46)	ND (<0.47)	ND (<0.46)
Barium	500	µg/m³	ND (<0.66)	ND (<0.47)	ND (<0.5)	<b>0.64</b>	<b>0.6</b>	ND (<0.46)	ND (<0.46)	ND (<0.47)	ND (<0.46)
Beryllium	0.2	µg/m³	ND (<0.33)	ND (<0.24)	ND (<0.25)	ND (<0.31)	ND (<0.24)	ND (<0.23)	ND (<0.23)	ND (<0.23)	ND (<0.23)
Cadmium	5	µg/m³	ND (<0.33)	<b>0.39</b>	<b>0.28</b>	ND (<0.31)	ND (<0.24)	<b>0.58</b>	ND (<0.23)	<b>0.32</b>	ND (<0.23)
Chromium (Total)	--	µg/m³	<b>1.5</b>	<b>4.3</b>	<b>4.2</b>	<b>2.1</b>	<b>1.8</b>	<b>9.3</b>	<b>1.1</b>	<b>7.5</b>	<b>1.3</b>
Cobalt	100	µg/m³	ND (<0.33)	ND (<0.24)	ND (<0.25)	ND (<0.31)	ND (<0.24)	ND (<0.23)	ND (<0.23)	ND (<0.23)	ND (<0.23)
Copper	1,000	µg/m³	<b>0.77</b>	<b>2.5</b>	<b>3</b>	<b>2.2</b>	<b>1.8</b>	<b>4.3</b>	<b>0.53</b>	<b>2.7</b>	<b>1.3</b>
Lead	50	µg/m³	ND (<0.66)	ND (<0.47)	ND (<0.5)	ND (<0.63)	ND (<0.48)	<b>0.61</b>	ND (<0.46)	ND (<0.47)	ND (<0.46)
Molybdenum	15,000	µg/m³	ND (<0.66)	ND (<0.47)	ND (<0.5)	ND (<0.63)	ND (<0.48)	ND (<0.46)	ND (<0.46)	ND (<0.47)	ND (<0.46)
Nickel	1,000	µg/m³	ND (<0.66)	ND (<0.47)	ND (<0.5)	ND (<0.63)	ND (<0.48)	ND (<0.46)	ND (<0.46)	ND (<0.47)	ND (<0.46)
Selenium	200	µg/m³	ND (<2)	ND (<1.4)	ND (<1.5)	ND (<1.9)	ND (<1.4)	ND (<1.4)	ND (<1.4)	ND (<1.4)	ND (<1.4)
Silver	10	µg/m³	ND (<0.33)	ND (<0.24)	ND (<0.25)	ND (<0.31)	ND (<0.24)	ND (<0.23)	ND (<0.23)	ND (<0.23)	ND (<0.23)
Thallium	100	µg/m³	ND (<2)	ND (<1.4)	ND (<1.5)	ND (<1.9)	ND (<1.4)	ND (<1.4)	ND (<1.4)	ND (<1.4)	ND (<1.4)
Vanadium	500	µg/m³	ND (<0.66)	ND (<0.47)	ND (<0.5)	ND (<0.63)	ND (<0.48)	ND (<0.46)	ND (<0.46)	ND (<0.47)	ND (<0.46)
Zinc	5,000	µg/m³	<b>5.7</b>	<b>21</b>	<b>11</b>	<b>22</b>	<b>21</b>	<b>32</b>	<b>7.8</b>	<b>26</b>	<b>12</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m³	--	--	--	--	--	--	--	--	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-M1 091121	EDC-AM-M2 091121	EDC-AM-M1 091321	EDC-AM-P3-091321 (Duplicate of EDC-AM-M1-091321)	EDC-AM-M2 091321	EDC-AM-M1 091421	EDC-AM-M2 091421	EDC-AM-M1 091521
Sample Date			09/11/2021	09/11/2021	09/13/2021	09/13/2021	09/13/2021	09/14/2021	09/14/2021	09/15/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air							
Antimony	500	µg/m³	ND (<1.4)	ND (<1.4)	ND (<1.5)	ND (<1.6)	ND (<1.5)	ND (<1.3)	ND (<1.5)	ND (<1.5)
Arsenic	10	µg/m³	ND (<0.46)	ND (<0.46)	ND (<0.5)	ND (<0.52)	ND (<0.5)	ND (<0.43)	ND (<0.5)	ND (<0.49)
Barium	500	µg/m³	ND (<0.46)	ND (<0.46)	<b>0.84</b>	<b>0.97</b>	ND (<0.5)	ND (<0.43)	ND (<0.5)	ND (<0.49)
Beryllium	0.2	µg/m³	ND (<0.23)	ND (<0.23)	ND (<0.25)	ND (<0.26)	ND (<0.25)	ND (<0.22)	ND (<0.25)	ND (<0.24)
Cadmium	5	µg/m³	<b>0.66</b>	ND (<0.23)	<b>1.3</b>	<b>1.5</b>	ND (<0.25)	ND (<0.22)	ND (<0.25)	<b>0.35</b>
Chromium (Total)	--	µg/m³	<b>14</b>	<b>1.9</b>	<b>25</b>	<b>28</b>	<b>8.5</b>	<b>3.7</b>	<b>1.6</b>	<b>6.3</b>
Cobalt	100	µg/m³	ND (<0.23)	ND (<0.23)	<b>0.43</b>	<b>0.5</b>	ND (<0.25)	ND (<0.22)	ND (<0.25)	ND (<0.24)
Copper	1,000	µg/m³	<b>5.2</b>	<b>1.1</b>	<b>11</b>	<b>12</b>	<b>3.9</b>	<b>1.8</b>	<b>1.2</b>	<b>3.1</b>
Lead	50	µg/m³	<b>0.74</b>	ND (<0.46)	<b>1.8</b>	<b>2</b>	<b>0.57</b>	ND (<0.43)	ND (<0.5)	ND (<0.49)
Molybdenum	15,000	µg/m³	ND (<0.46)	ND (<0.46)	ND (<0.5)	ND (<0.52)	<b>0.58</b>	ND (<0.43)	ND (<0.5)	ND (<0.49)
Nickel	1,000	µg/m³	<b>0.5</b>	ND (<0.46)	<b>1.2</b>	<b>1.3</b>	<b>3.8</b>	ND (<0.43)	ND (<0.5)	ND (<0.49)
Selenium	200	µg/m³	ND (<1.4)	ND (<1.4)	ND (<1.5)	ND (<1.6)	ND (<1.5)	ND (<1.3)	ND (<1.5)	ND (<1.5)
Silver	10	µg/m³	ND (<0.23)	ND (<0.23)	<b>0.27</b>	<b>0.3</b>	ND (<0.25)	ND (<0.22)	ND (<0.25)	ND (<0.24)
Thallium	100	µg/m³	ND (<1.4)	ND (<1.4)	ND (<1.5)	ND (<1.6)	ND (<1.5)	ND (<1.3)	ND (<1.5)	ND (<1.5)
Vanadium	500	µg/m³	ND (<0.46)	ND (<0.46)	ND (<0.5)	ND (<0.52)	ND (<0.5)	ND (<0.43)	ND (<0.5)	ND (<0.49)
Zinc	5,000	µg/m³	<b>53</b>	<b>19</b>	<b>110</b>	<b>120</b>	<b>32</b>	<b>15</b>	<b>10</b>	<b>37</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air							
Hexavalent Chromium	5	µg/m³	--	--	--	--	--	--	--	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-P3-091521 (Duplicate of EDC-AM-M1-091521)	EDC-AM-M2- 091521	EDC-AM-M1- 091621	EDC-AM-M2- 091621	EDC-AM-H1- 091721	EDC-AM-H2- 091721	EDC-AM-M1- 091721	EDC-AM-M2- 091721
Sample Date			09/15/2021	09/15/2021	09/16/2021	09/16/2021	09/17/2021	09/17/2021	09/17/2021	09/17/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air							
Antimony	500	µg/m³	ND (<1.5)	ND (<1.5)	ND (<1.4)	ND (<1.4)	--	--	ND (<1.3)	ND (<1.3)
Arsenic	10	µg/m³	ND (<0.51)	ND (<0.49)	ND (<0.48)	ND (<0.48)	--	--	ND (<0.43)	ND (<0.45)
Barium	500	µg/m³	ND (<0.51)	ND (<0.49)	ND (<0.48)	ND (<0.48)	--	--	ND (<0.43)	ND (<0.45)
Beryllium	0.2	µg/m³	ND (<0.25)	ND (<0.24)	ND (<0.24)	ND (<0.24)	--	--	ND (<0.21)	ND (<0.22)
Cadmium	5	µg/m³	<b>0.38</b>	ND (<0.24)	<b>0.79</b>	ND (<0.24)	--	--	<b>0.3</b>	ND (<0.22)
Chromium (Total)	--	µg/m³	<b>6.8</b>	<b>1.4</b>	<b>8</b>	<b>0.9</b>	--	--	<b>3.8</b>	<b>1</b>
Cobalt	100	µg/m³	ND (<0.25)	ND (<0.24)	ND (<0.24)	ND (<0.24)	--	--	ND (<0.21)	ND (<0.22)
Copper	1,000	µg/m³	<b>3.3</b>	<b>1.1</b>	<b>14</b>	<b>0.73</b>	--	--	<b>3</b>	<b>0.74</b>
Lead	50	µg/m³	ND (<0.51)	ND (<0.49)	<b>1.5</b>	ND (<0.48)	--	--	ND (<0.43)	ND (<0.45)
Molybdenum	15,000	µg/m³	ND (<0.51)	ND (<0.49)	ND (<0.48)	ND (<0.48)	--	--	ND (<0.43)	ND (<0.45)
Nickel	1,000	µg/m³	ND (<0.51)	ND (<0.49)	ND (<0.48)	ND (<0.48)	--	--	ND (<0.43)	ND (<0.45)
Selenium	200	µg/m³	ND (<1.5)	ND (<1.5)	ND (<1.4)	ND (<1.4)	--	--	ND (<1.3)	ND (<1.3)
Silver	10	µg/m³	ND (<0.25)	ND (<0.24)	ND (<0.24)	ND (<0.24)	--	--	ND (<0.21)	ND (<0.22)
Thallium	100	µg/m³	ND (<1.5)	ND (<1.5)	ND (<1.4)	ND (<1.4)	--	--	ND (<1.3)	ND (<1.3)
Vanadium	500	µg/m³	ND (<0.51)	ND (<0.49)	ND (<0.48)	ND (<0.48)	--	--	ND (<0.43)	ND (<0.45)
Zinc	5,000	µg/m³	<b>39</b>	<b>10</b>	<b>47</b>	<b>6.9</b>	--	--	<b>23</b>	<b>6.8</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air							
Hexavalent Chromium	5	µg/m³	--	--	--	--	<b>1.7</b>	<b>0.28</b>	--	--



**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H1-091821	EDC-AM-H2-091821	EDC-AM-M1-091821	EDC-AM-M2-091821	EDC-AM-H1-092021	EDC-AM-P3-092021 (Duplicate of EDC-AM-H1-092021)	EDC-AM-H2-092021	EDC-AM-M1-092021
Sample Date			09/18/2021	09/18/2021	09/18/2021	09/18/2021	09/20/2021	09/20/2021	09/20/2021	09/20/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air							
Antimony	500	µg/m³	--	--	ND (<1.5)	ND (<1.5)	--	--	--	ND (<1.5)
Arsenic	10	µg/m³	--	--	ND (<0.49)	ND (<0.51)	--	--	--	ND (<0.5)
Barium	500	µg/m³	--	--	ND (<0.49)	ND (<0.51)	--	--	--	ND (<0.5)
Beryllium	0.2	µg/m³	--	--	ND (<0.24)	ND (<0.26)	--	--	--	ND (<0.25)
Cadmium	5	µg/m³	--	--	0.7	ND (<0.26)	--	--	--	ND (<0.25)
Chromium (Total)	--	µg/m³	--	--	12	ND (<0.51)	--	--	--	2.2
Cobalt	100	µg/m³	--	--	ND (<0.24)	ND (<0.26)	--	--	--	ND (<0.25)
Copper	1,000	µg/m³	--	--	5.9	ND (<0.51)	--	--	--	1.9
Lead	50	µg/m³	--	--	0.9	ND (<0.51)	--	--	--	ND (<0.5)
Molybdenum	15,000	µg/m³	--	--	ND (<0.49)	ND (<0.51)	--	--	--	ND (<0.5)
Nickel	1,000	µg/m³	--	--	ND (<0.49)	ND (<0.51)	--	--	--	ND (<0.5)
Selenium	200	µg/m³	--	--	ND (<1.5)	ND (<1.5)	--	--	--	ND (<1.5)
Silver	10	µg/m³	--	--	ND (<0.24)	ND (<0.26)	--	--	--	ND (<0.25)
Thallium	100	µg/m³	--	--	ND (<1.5)	ND (<1.5)	--	--	--	ND (<1.5)
Vanadium	500	µg/m³	--	--	ND (<0.49)	ND (<0.51)	--	--	--	ND (<0.5)
Zinc	5,000	µg/m³	--	--	58	ND (<2.6)	--	--	--	13
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air							
Hexavalent Chromium	5	µg/m³	1.3	0.4	--	--	0.72	0.64	0.41	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-M2 092021	EDC-AM-H1- 092121	EDC-AM-H2- 092121	EDC-AM-H3- 092121	EDC-AM-M1- 092121	EDC-AM-M2 092121	EDC-AM-M3- 092121	EDC-AM-P3-092121 (Duplicate of EDC-AM-M3-092121)	EDC-AM-H1- 092221
Sample Date			09/20/2021	09/21/2021	09/21/2021	09/21/2021	09/21/2021	09/21/2021	09/21/2021	09/21/2021	09/22/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m³	ND (<1.6)	--	--	--	ND (<1.4)	ND (<1.4)	ND (<1.5)	ND (<1.6)	--
Arsenic	10	µg/m³	ND (<0.53)	--	--	--	ND (<0.46)	ND (<0.48)	ND (<0.5)	ND (<0.53)	--
Barium	500	µg/m³	ND (<0.53)	--	--	--	ND (<0.46)	ND (<0.48)	ND (<0.5)	ND (<0.53)	--
Beryllium	0.2	µg/m³	ND (<0.26)	--	--	--	ND (<0.23)	ND (<0.24)	ND (<0.25)	ND (<0.27)	--
Cadmium	5	µg/m³	ND (<0.26)	--	--	--	ND (<0.23)	<b>0.28</b>	ND (<0.25)	ND (<0.27)	--
Chromium (Total)	--	µg/m³	<b>1.6</b>	--	--	--	<b>1.6</b>	<b>2.4</b>	ND (<0.5)	ND (<0.53)	--
Cobalt	100	µg/m³	ND (<0.26)	--	--	--	ND (<0.23)	ND (<0.24)	ND (<0.25)	ND (<0.27)	--
Copper	1,000	µg/m³	ND (<0.53)	--	--	--	<b>1.1</b>	<b>1.9</b>	<b>0.76</b>	<b>0.74</b>	--
Lead	50	µg/m³	ND (<0.53)	--	--	--	ND (<0.46)	ND (<0.48)	ND (<0.5)	ND (<0.53)	--
Molybdenum	15,000	µg/m³	ND (<0.53)	--	--	--	ND (<0.46)	ND (<0.48)	ND (<0.5)	ND (<0.53)	--
Nickel	1,000	µg/m³	<b>0.94</b>	--	--	--	ND (<0.46)	ND (<0.48)	ND (<0.5)	ND (<0.53)	--
Selenium	200	µg/m³	ND (<1.6)	--	--	--	ND (<1.4)	ND (<1.4)	ND (<1.5)	ND (<1.6)	--
Silver	10	µg/m³	ND (<0.26)	--	--	--	ND (<0.23)	ND (<0.24)	ND (<0.25)	ND (<0.27)	--
Thallium	100	µg/m³	ND (<1.6)	--	--	--	ND (<1.4)	ND (<1.4)	ND (<1.5)	ND (<1.6)	--
Vanadium	500	µg/m³	ND (<0.53)	--	--	--	ND (<0.46)	ND (<0.48)	ND (<0.5)	ND (<0.53)	--
Zinc	5,000	µg/m³	<b>3.4</b>	--	--	--	<b>12</b>	<b>11</b>	<b>3</b>	<b>3</b>	--
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m³	--	<b>0.53</b>	<b>0.61</b>	<b>0.3</b>	--	--	--	--	<b>0.73</b>

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H2-092221	EDC-AM-H3-092221	EDC-AM-M1-092221	EDC-AM-M2-092221	EDC-AM-M3-092221	EDC-AM-H1-092321	EDC-AM-H2-092321	EDC-AM-H3-092321	EDC-AM-P3-092321 (Duplicate of EDC-AM-H3-092321)
Sample Date			09/22/2021	09/22/2021	09/22/2021	09/22/2021	09/22/2021	09/23/2021	09/23/2021	09/23/2021	09/23/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m <sup>3</sup>	--	--	ND (<1.3)	ND (<1.4)	ND (<1.3)	--	--	--	--
Arsenic	10	µg/m <sup>3</sup>	--	--	ND (<0.45)	ND (<0.46)	ND (<0.44)	--	--	--	--
Barium	500	µg/m <sup>3</sup>	--	--	ND (<0.45)	<b>0.91</b>	ND (<0.44)	--	--	--	--
Beryllium	0.2	µg/m <sup>3</sup>	--	--	ND (<0.22)	ND (<0.23)	ND (<0.22)	--	--	--	--
Cadmium	5	µg/m <sup>3</sup>	--	--	<b>0.4</b>	ND (<0.23)	ND (<0.22)	--	--	--	--
Chromium (Total)	--	µg/m <sup>3</sup>	--	--	<b>3.4</b>	<b>3.7</b>	<b>2.1</b>	--	--	--	--
Cobalt	100	µg/m <sup>3</sup>	--	--	ND (<0.22)	ND (<0.23)	ND (<0.22)	--	--	--	--
Copper	1,000	µg/m <sup>3</sup>	--	--	<b>2.5</b>	<b>3.9</b>	<b>0.91</b>	--	--	--	--
Lead	50	µg/m <sup>3</sup>	--	--	ND (<0.45)	<b>0.75</b>	ND (<0.44)	--	--	--	--
Molybdenum	15,000	µg/m <sup>3</sup>	--	--	ND (<0.45)	ND (<0.46)	ND (<0.44)	--	--	--	--
Nickel	1,000	µg/m <sup>3</sup>	--	--	ND (<0.45)	ND (<0.46)	ND (<0.44)	--	--	--	--
Selenium	200	µg/m <sup>3</sup>	--	--	ND (<1.3)	ND (<1.4)	ND (<1.3)	--	--	--	--
Silver	10	µg/m <sup>3</sup>	--	--	<b>0.27</b>	ND (<0.23)	ND (<0.22)	--	--	--	--
Thallium	100	µg/m <sup>3</sup>	--	--	ND (<1.3)	ND (<1.4)	ND (<1.3)	--	--	--	--
Vanadium	500	µg/m <sup>3</sup>	--	--	ND (<0.45)	ND (<0.46)	ND (<0.44)	--	--	--	--
Zinc	5,000	µg/m <sup>3</sup>	--	--	<b>14</b>	<b>23</b>	<b>9.8</b>	--	--	--	--
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m <sup>3</sup>	<b>0.53</b>	<b>0.82</b>	--	--	--	<b>0.39</b>	<b>0.28</b>	<b>0.63</b>	<b>0.79</b>

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-M1 092321	EDC-AM-M2 092321	EDC-AM-M3 092321	EDC-AM-H1 092421	EDC-AM-H2 092421	EDC-AM-H3 092421	EDC-AM-M1 092421	EDC-AM-M2 092421	EDC-AM-M3 092421
Sample Date			09/23/2021	09/23/2021	09/23/2021	09/24/2021	09/24/2021	09/24/2021	09/24/2021	09/24/2021	09/24/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m <sup>3</sup>	ND (<1.5)	ND (<1.5)	ND (<1.4)	--	--	--	ND (<1.3)	ND (<1.4)	ND (<1.3)
Arsenic	10	µg/m <sup>3</sup>	ND (<0.49)	ND (<0.49)	ND (<0.46)	--	--	--	ND (<0.43)	ND (<0.45)	ND (<0.43)
Barium	500	µg/m <sup>3</sup>	ND (<0.49)	ND (<0.49)	<b>1</b>	--	--	--	ND (<0.43)	ND (<0.45)	<b>0.67</b>
Beryllium	0.2	µg/m <sup>3</sup>	ND (<0.24)	ND (<0.25)	ND (<0.23)	--	--	--	ND (<0.21)	ND (<0.23)	ND (<0.22)
Cadmium	5	µg/m <sup>3</sup>	ND (<0.24)	ND (<0.25)	ND (<0.23)	--	--	--	ND (<0.21)	ND (<0.23)	ND (<0.22)
Chromium (Total)	--	µg/m <sup>3</sup>	<b>1</b>	<b>0.94</b>	<b>2.1</b>	--	--	--	<b>0.6</b>	<b>1.1</b>	<b>1.7</b>
Cobalt	100	µg/m <sup>3</sup>	ND (<0.24)	ND (<0.25)	ND (<0.23)	--	--	--	ND (<0.21)	ND (<0.23)	ND (<0.22)
Copper	1,000	µg/m <sup>3</sup>	<b>0.89</b>	<b>0.59</b>	<b>4.4</b>	--	--	--	<b>0.71</b>	<b>0.77</b>	<b>5.5</b>
Lead	50	µg/m <sup>3</sup>	ND (<0.49)	ND (<0.49)	ND (<0.46)	--	--	--	ND (<0.43)	ND (<0.45)	ND (<0.43)
Molybdenum	15,000	µg/m <sup>3</sup>	ND (<0.49)	ND (<0.49)	ND (<0.46)	--	--	--	ND (<0.43)	ND (<0.45)	ND (<0.43)
Nickel	1,000	µg/m <sup>3</sup>	ND (<0.49)	ND (<0.49)	ND (<0.46)	--	--	--	ND (<0.43)	ND (<0.45)	ND (<0.43)
Selenium	200	µg/m <sup>3</sup>	ND (<1.5)	ND (<1.5)	ND (<1.4)	--	--	--	ND (<1.3)	ND (<1.4)	ND (<1.3)
Silver	10	µg/m <sup>3</sup>	ND (<0.24)	ND (<0.25)	ND (<0.23)	--	--	--	ND (<0.21)	ND (<0.23)	ND (<0.22)
Thallium	100	µg/m <sup>3</sup>	ND (<1.5)	ND (<1.5)	ND (<1.4)	--	--	--	ND (<1.3)	ND (<1.4)	ND (<1.3)
Vanadium	500	µg/m <sup>3</sup>	ND (<0.49)	ND (<0.49)	ND (<0.46)	--	--	--	ND (<0.43)	ND (<0.45)	ND (<0.43)
Zinc	5,000	µg/m <sup>3</sup>	<b>4.9</b>	<b>4</b>	<b>25</b>	--	--	--	ND (<2.1)	<b>5.2</b>	<b>18</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m <sup>3</sup>	--	--	--	<b>0.25</b>	<b>0.43</b>	<b>0.6</b>	--	--	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H1-092521	EDC-AM-H2-092521	EDC-AM-H3-092521	EDC-AM-M1-092521	EDC-AM-P3-092521 (Duplicate of EDC-AM-M1-092521)	EDC-AM-M2-092521	EDC-AM-M3-092521	EDC-AM-H2-092721	EDC-AM-H3-092721
Sample Date			09/25/2021	09/25/2021	09/25/2021	09/25/2021	09/25/2021	09/25/2021	09/25/2021	09/27/2021	09/27/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m³	--	--	--	ND (<2.1)	ND (<2.2)	ND (<1.6)	ND (<1.5)	--	--
Arsenic	10	µg/m³	--	--	--	ND (<0.7)	ND (<0.72)	ND (<0.52)	ND (<0.5)	--	--
Barium	500	µg/m³	--	--	--	ND (<0.7)	ND (<0.72)	ND (<0.52)	ND (<0.5)	--	--
Beryllium	0.2	µg/m³	--	--	--	ND (<0.35)	ND (<0.36)	ND (<0.26)	ND (<0.25)	--	--
Cadmium	5	µg/m³	--	--	--	ND (<0.35)	ND (<0.36)	ND (<0.26)	ND (<0.25)	--	--
Chromium (Total)	--	µg/m³	--	--	--	<b>1</b>	<b>0.8</b>	<b>3.7</b>	<b>2.3</b>	--	--
Cobalt	100	µg/m³	--	--	--	ND (<0.35)	ND (<0.36)	ND (<0.26)	ND (<0.25)	--	--
Copper	1,000	µg/m³	--	--	--	<b>1.2</b>	<b>1.3</b>	<b>3.3</b>	<b>1.7</b>	--	--
Lead	50	µg/m³	--	--	--	ND (<0.7)	ND (<0.72)	ND (<0.52)	ND (<0.5)	--	--
Molybdenum	15,000	µg/m³	--	--	--	<b>1.3</b>	ND (<0.72)	ND (<0.52)	<b>0.55</b>	--	--
Nickel	1,000	µg/m³	--	--	--	ND (<0.7)	ND (<0.72)	ND (<0.52)	ND (<0.5)	--	--
Selenium	200	µg/m³	--	--	--	ND (<2.1)	ND (<2.2)	ND (<1.6)	ND (<1.5)	--	--
Silver	10	µg/m³	--	--	--	ND (<0.35)	ND (<0.36)	ND (<0.26)	ND (<0.25)	--	--
Thallium	100	µg/m³	--	--	--	ND (<2.1)	ND (<2.2)	ND (<1.6)	ND (<1.5)	--	--
Vanadium	500	µg/m³	--	--	--	ND (<0.7)	ND (<0.72)	ND (<0.52)	ND (<0.5)	--	--
Zinc	5,000	µg/m³	--	--	--	ND (<3.5)	<b>3.9</b>	<b>27</b>	<b>7.2</b>	--	--
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m³	<b>0.39</b>	<b>0.86</b>	<b>1.2</b>	--	--	--	--	<b>0.19</b>	<b>0.79</b>

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-M2 092721	EDC-AM-M3 092721	EDC-AM-H2 092821	EDC-AM-H3 092821	EDC-AM-M2 092821	EDC-AM-P3-092821 (Duplicate of EDC-AM-M2-092821)	EDC-AM-M3 092821	EDC-AM-H2 092921
Sample Date			09/27/2021	09/27/2021	09/28/2021	09/28/2021	09/28/2021	09/28/2021	09/28/2021	09/29/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air							
Antimony	500	µg/m <sup>3</sup>	ND (<1.4)	ND (<1.3)	--	--	ND (<1.6)	ND (<1.6)	ND (<1.5)	--
Arsenic	10	µg/m <sup>3</sup>	ND (<0.47)	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	ND (<0.5)	--
Barium	500	µg/m <sup>3</sup>	ND (<0.47)	<b>0.61</b>	--	--	ND (<0.53)	ND (<0.53)	<b>0.54</b>	--
Beryllium	0.2	µg/m <sup>3</sup>	ND (<0.23)	ND (<0.22)	--	--	ND (<0.27)	ND (<0.27)	ND (<0.25)	--
Cadmium	5	µg/m <sup>3</sup>	ND (<0.23)	ND (<0.22)	--	--	ND (<0.27)	ND (<0.27)	ND (<0.25)	--
Chromium (Total)	--	µg/m <sup>3</sup>	<b>0.64</b>	<b>6.3</b>	--	--	<b>0.78</b>	<b>0.63</b>	<b>6.5</b>	--
Cobalt	100	µg/m <sup>3</sup>	ND (<0.23)	ND (<0.22)	--	--	ND (<0.27)	ND (<0.27)	ND (<0.25)	--
Copper	1,000	µg/m <sup>3</sup>	ND (<0.47)	<b>4.7</b>	--	--	<b>0.63</b>	<b>0.63</b>	<b>11</b>	--
Lead	50	µg/m <sup>3</sup>	ND (<0.47)	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	<b>2.3</b>	--
Molybdenum	15,000	µg/m <sup>3</sup>	ND (<0.47)	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	ND (<0.5)	--
Nickel	1,000	µg/m <sup>3</sup>	ND (<0.47)	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	ND (<0.5)	--
Selenium	200	µg/m <sup>3</sup>	ND (<1.4)	ND (<1.3)	--	--	ND (<1.6)	ND (<1.6)	ND (<1.5)	--
Silver	10	µg/m <sup>3</sup>	ND (<0.23)	ND (<0.22)	--	--	ND (<0.27)	ND (<0.27)	ND (<0.25)	--
Thallium	100	µg/m <sup>3</sup>	ND (<1.4)	ND (<1.3)	--	--	ND (<1.6)	ND (<1.6)	ND (<1.5)	--
Vanadium	500	µg/m <sup>3</sup>	ND (<0.47)	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	ND (<0.5)	--
Zinc	5,000	µg/m <sup>3</sup>	<b>2.7</b>	<b>40</b>	--	--	<b>3.9</b>	<b>3.7</b>	<b>39</b>	--
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air							
Hexavalent Chromium	5	µg/m <sup>3</sup>	--	--	<b>0.35</b>	<b>1.1</b>	--	--	--	<b>0.35</b>

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H3-092921	EDC-AM-M2-092921	EDC-AM-M3-092921	EDC-AM-H2-093021	EDC-AM-H3-093021	EDC-AM-M2-093021	EDC-AM-P3-093021 (Duplicate of EDC-AM-M2-093021)	EDC-AM-M3-093021
Sample Date			09/29/2021	09/29/2021	09/29/2021	09/30/2021	09/30/2021	09/30/2021	09/30/2021	09/30/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air							
Antimony	500	µg/m³	--	ND (<1.5)	ND (<1.4)	--	--	ND (<1.6)	ND (<1.6)	ND (<1.4)
Arsenic	10	µg/m³	--	ND (<0.49)	ND (<0.47)	--	--	ND (<0.52)	ND (<0.52)	ND (<0.47)
Barium	500	µg/m³	--	ND (<0.49)	ND (<0.47)	--	--	ND (<0.52)	ND (<0.52)	<b>0.49</b>
Beryllium	0.2	µg/m³	--	ND (<0.25)	ND (<0.24)	--	--	ND (<0.26)	ND (<0.26)	ND (<0.24)
Cadmium	5	µg/m³	--	ND (<0.25)	ND (<0.24)	--	--	ND (<0.26)	ND (<0.26)	ND (<0.24)
Chromium (Total)	--	µg/m³	--	<b>1</b>	<b>5.6</b>	--	--	<b>2.9</b>	<b>2.7</b>	<b>3.6</b>
Cobalt	100	µg/m³	--	ND (<0.25)	ND (<0.24)	--	--	ND (<0.26)	ND (<0.26)	ND (<0.24)
Copper	1,000	µg/m³	--	ND (<0.49)	<b>7.2</b>	--	--	<b>0.76</b>	<b>0.73</b>	<b>5</b>
Lead	50	µg/m³	--	ND (<0.49)	<b>0.77</b>	--	--	<b>0.7</b>	<b>0.8</b>	<b>5.4</b>
Molybdenum	15,000	µg/m³	--	ND (<0.49)	ND (<0.47)	--	--	ND (<0.52)	ND (<0.52)	ND (<0.47)
Nickel	1,000	µg/m³	--	ND (<0.49)	ND (<0.47)	--	--	ND (<0.52)	ND (<0.52)	ND (<0.47)
Selenium	200	µg/m³	--	ND (<1.5)	ND (<1.4)	--	--	ND (<1.6)	ND (<1.6)	ND (<1.4)
Silver	10	µg/m³	--	ND (<0.25)	ND (<0.24)	--	--	<b>0.37</b>	<b>0.37</b>	ND (<0.24)
Thallium	100	µg/m³	--	ND (<1.5)	ND (<1.4)	--	--	ND (<1.6)	ND (<1.6)	ND (<1.4)
Vanadium	500	µg/m³	--	ND (<0.49)	ND (<0.47)	--	--	ND (<0.52)	ND (<0.52)	ND (<0.47)
Zinc	5,000	µg/m³	--	<b>4.9</b>	<b>22</b>	--	--	<b>11</b>	<b>11</b>	<b>51</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air							
Hexavalent Chromium	5	µg/m³	<b>0.77</b>	--	--	<b>0.4</b>	<b>0.27</b>	--	--	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H2-100121	EDC-AM-H3-100121	EDC-AM-P3-100121 (Duplicate of EDC-AM-H3-100121)	EDC-AM-M2-100121	EDC-AM-M3-100121	EDC-AM-H2-100421	EDC-AM-H3-100421	EDC-AM-M2-100421	EDC-AM-M3-100421
Sample Date			10/01/2021	10/01/2021	10/01/2021	10/01/2021	10/01/2021	10/04/2021	10/04/2021	10/04/2021	10/04/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m <sup>3</sup>	--	--	--	ND (<1.5)	ND (<1.4)	--	--	ND (<1.5)	ND (<1.6)
Arsenic	10	µg/m <sup>3</sup>	--	--	--	ND (<0.51)	ND (<0.48)	--	--	ND (<0.51)	ND (<0.53)
Barium	500	µg/m <sup>3</sup>	--	--	--	ND (<0.51)	ND (<0.48)	--	--	ND (<0.51)	ND (<0.53)
Beryllium	0.2	µg/m <sup>3</sup>	--	--	--	ND (<0.25)	ND (<0.24)	--	--	ND (<0.25)	ND (<0.27)
Cadmium	5	µg/m <sup>3</sup>	--	--	--	ND (<0.25)	ND (<0.24)	--	--	ND (<0.25)	ND (<0.27)
Chromium (Total)	--	µg/m <sup>3</sup>	--	--	--	1.5	2.8	--	--	1.9	1.1
Cobalt	100	µg/m <sup>3</sup>	--	--	--	ND (<0.25)	ND (<0.24)	--	--	ND (<0.25)	ND (<0.27)
Copper	1,000	µg/m <sup>3</sup>	--	--	--	0.68	7.4	--	--	5.1	1.3
Lead	50	µg/m <sup>3</sup>	--	--	--	ND (<0.51)	ND (<0.48)	--	--	3.7	ND (<0.53)
Molybdenum	15,000	µg/m <sup>3</sup>	--	--	--	ND (<0.51)	ND (<0.48)	--	--	ND (<0.51)	ND (<0.53)
Nickel	1,000	µg/m <sup>3</sup>	--	--	--	ND (<0.51)	ND (<0.48)	--	--	ND (<0.51)	ND (<0.53)
Selenium	200	µg/m <sup>3</sup>	--	--	--	ND (<1.5)	ND (<1.4)	--	--	ND (<1.5)	ND (<1.6)
Silver	10	µg/m <sup>3</sup>	--	--	--	ND (<0.25)	ND (<0.24)	--	--	ND (<0.25)	ND (<0.27)
Thallium	100	µg/m <sup>3</sup>	--	--	--	ND (<1.5)	ND (<1.4)	--	--	ND (<1.5)	ND (<1.6)
Vanadium	500	µg/m <sup>3</sup>	--	--	--	ND (<0.51)	ND (<0.48)	--	--	ND (<0.51)	ND (<0.53)
Zinc	5,000	µg/m <sup>3</sup>	--	--	--	12	41	--	--	31	12
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m <sup>3</sup>	0.48	0.33	0.37	--	--	ND (<0.12)	0.22	--	--



**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H2-100521	EDC-AM-H3-100521	EDC-AM-M2-100521	EDC-AM-P3-100521 (Duplicate of EDC-AM-M2-100521)	EDC-AM-M3-100521	EDC-AM-H2-100621	EDC-AM-H3-100621	EDC-AM-M2-100621	EDC-AM-M3-100621
Sample Date			10/05/2021	10/05/2021	10/05/2021	10/05/2021	10/05/2021	10/06/2021	10/06/2021	10/06/2021	10/06/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m³	--	--	1.5	ND (<1.4)	ND (<1.3)	--	--	ND (<1.4)	ND (<1.4)
Arsenic	10	µg/m³	--	--	ND (<0.46)	ND (<0.46)	ND (<0.44)	--	--	ND (<0.48)	ND (<0.46)
Barium	500	µg/m³	--	--	ND (<0.46)	ND (<0.46)	ND (<0.44)	--	--	ND (<0.48)	ND (<0.46)
Beryllium	0.2	µg/m³	--	--	ND (<0.23)	ND (<0.23)	ND (<0.22)	--	--	ND (<0.24)	ND (<0.23)
Cadmium	5	µg/m³	--	--	ND (<0.23)	ND (<0.23)	ND (<0.22)	--	--	ND (<0.24)	ND (<0.23)
Chromium (Total)	--	µg/m³	--	--	1.4 J	0.86 J	1	--	--	3	2.8
Cobalt	100	µg/m³	--	--	ND (<0.23)	ND (<0.23)	ND (<0.22)	--	--	ND (<0.24)	ND (<0.23)
Copper	1,000	µg/m³	--	--	6.8 J	3.7 J	1.4	--	--	11	2.4
Lead	50	µg/m³	--	--	ND (<0.46)	ND (<0.46)	ND (<0.44)	--	--	ND (<0.48)	0.74
Molybdenum	15,000	µg/m³	--	--	0.85	ND (<0.46)	ND (<0.44)	--	--	0.88	ND (<0.46)
Nickel	1,000	µg/m³	--	--	ND (<0.46)	ND (<0.46)	ND (<0.44)	--	--	ND (<0.48)	ND (<0.46)
Selenium	200	µg/m³	--	--	ND (<1.4)	ND (<1.4)	ND (<1.3)	--	--	ND (<1.4)	ND (<1.4)
Silver	10	µg/m³	--	--	ND (<0.23)	ND (<0.23)	ND (<0.22)	--	--	ND (<0.24)	0.28
Thallium	100	µg/m³	--	--	ND (<1.4)	ND (<1.4)	ND (<1.3)	--	--	ND (<1.4)	ND (<1.4)
Vanadium	500	µg/m³	--	--	ND (<0.46)	ND (<0.46)	ND (<0.44)	--	--	ND (<0.48)	ND (<0.46)
Zinc	5,000	µg/m³	--	--	76 J	34 J	18	--	--	61	29
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m³	0.17	0.26	--	--	--	0.51	0.27	--	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H2-100721	EDC-AM-H3-100721	EDC-AM-M2-100721	EDC-AM-M3-100721	EDC-AM-P3-100721 (Duplicate of EDC-AM-M3-100721)	EDC-AM-H2-100821	EDC-AM-H3-100821	EDC-AM-M2-100821
Sample Date			10/07/2021	10/07/2021	10/07/2021	10/07/2021	10/07/2021	10/08/2021	10/08/2021	10/08/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air							
Antimony	500	µg/m³	--	--	ND (<1.4)	ND (<1.4)	ND (<1.4)	--	--	ND (<1.4)
Arsenic	10	µg/m³	--	--	ND (<0.47)	ND (<0.45)	ND (<0.47)	--	--	ND (<0.48)
Barium	500	µg/m³	--	--	ND (<0.47)	ND (<0.45)	ND (<0.47)	--	--	ND (<0.48)
Beryllium	0.2	µg/m³	--	--	ND (<0.24)	ND (<0.23)	ND (<0.24)	--	--	ND (<0.24)
Cadmium	5	µg/m³	--	--	ND (<0.24)	ND (<0.23)	ND (<0.24)	--	--	ND (<0.24)
Chromium (Total)	--	µg/m³	--	--	2.7	0.55	0.64	--	--	2
Cobalt	100	µg/m³	--	--	ND (<0.24)	ND (<0.23)	ND (<0.24)	--	--	ND (<0.24)
Copper	1,000	µg/m³	--	--	6.1	1.7	2	--	--	4.7
Lead	50	µg/m³	--	--	0.78	ND (<0.45)	ND (<0.47)	--	--	ND (<0.48)
Molybdenum	15,000	µg/m³	--	--	ND (<0.47)	ND (<0.45)	ND (<0.47)	--	--	ND (<0.48)
Nickel	1,000	µg/m³	--	--	ND (<0.47)	ND (<0.45)	ND (<0.47)	--	--	ND (<0.48)
Selenium	200	µg/m³	--	--	ND (<1.4)	ND (<1.4)	ND (<1.4)	--	--	ND (<1.4)
Silver	10	µg/m³	--	--	ND (<0.24)	ND (<0.23)	ND (<0.24)	--	--	ND (<0.24)
Thallium	100	µg/m³	--	--	ND (<1.4)	ND (<1.4)	ND (<1.4)	--	--	ND (<1.4)
Vanadium	500	µg/m³	--	--	ND (<0.47)	ND (<0.45)	ND (<0.47)	--	--	ND (<0.48)
Zinc	5,000	µg/m³	--	--	43	29	32	--	--	36
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air							
Hexavalent Chromium	5	µg/m³	0.32	0.12	--	--	--	0.26 J	0.2 J	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-M3-100821	EDC-AM-H3-100921	EDC-AM-P4-100921 (Duplicate of EDC-AM-H3-100921)	EDC-AM-M3-100921	EDC-AM-P3-100921 (Duplicate of EDC-AM-M3-100921)	EDC-AM-H1-101121	EDC-AM-H3-101121	EDC-AM-M1-101121
Sample Date			10/08/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/11/2021	10/11/2021	10/11/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air							
Antimony	500	µg/m³	ND (<1.3)	--	--	ND (<1.6)	ND (<1.6)	--	--	ND (<1.4)
Arsenic	10	µg/m³	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	--	--	ND (<0.46)
Barium	500	µg/m³	ND (<0.45)	--	--	<b>0.66</b>	ND (<0.53)	--	--	ND (<0.46)
Beryllium	0.2	µg/m³	ND (<0.22)	--	--	ND (<0.27)	ND (<0.26)	--	--	ND (<0.23)
Cadmium	5	µg/m³	ND (<0.22)	--	--	ND (<0.27)	ND (<0.26)	--	--	ND (<0.23)
Chromium (Total)	--	µg/m³	<b>1.1</b>	--	--	<b>3.5 J</b>	<b>2.5 J</b>	--	--	<b>1</b>
Cobalt	100	µg/m³	ND (<0.22)	--	--	ND (<0.27)	ND (<0.26)	--	--	ND (<0.23)
Copper	1,000	µg/m³	<b>1.4</b>	--	--	<b>1.6</b>	<b>1.3</b>	--	--	<b>1.1</b>
Lead	50	µg/m³	ND (<0.45)	--	--	<b>1.1 J</b>	ND (<0.53) J	--	--	ND (<0.46)
Molybdenum	15,000	µg/m³	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	--	--	ND (<0.46)
Nickel	1,000	µg/m³	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	--	--	ND (<0.46)
Selenium	200	µg/m³	ND (<1.3)	--	--	ND (<1.6)	ND (<1.6)	--	--	ND (<1.4)
Silver	10	µg/m³	ND (<0.22)	--	--	ND (<0.27)	ND (<0.26)	--	--	ND (<0.23)
Thallium	100	µg/m³	ND (<1.3)	--	--	ND (<1.6)	ND (<1.6)	--	--	ND (<1.4)
Vanadium	500	µg/m³	ND (<0.45)	--	--	ND (<0.53)	ND (<0.53)	--	--	ND (<0.46)
Zinc	5,000	µg/m³	<b>27</b>	--	--	<b>54 J</b>	<b>31 J</b>	--	--	<b>11</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air							
Hexavalent Chromium	5	µg/m³	--	<b>0.44 J</b>	ND (<0.13) J	--	--	<b>0.13</b>	<b>0.6</b>	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-M3 101121	EDC-AM-H1 101221	EDC-AM-H2 101221	EDC-AM-H3 101221	EDC-AM-M1 101221	EDC-AM-M2 101221	EDC-AM-M3 101221	EDC-AM-H1 101321	EDC-AM-H2 101321
Sample Date			10/11/2021	10/12/2021	10/12/2021	10/12/2021	10/12/2021	10/12/2021	10/12/2021	10/13/2021	10/13/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m <sup>3</sup>	ND (<1.3)	--	--	--	ND (<1.3)	ND (<1.4)	ND (<1.7)	--	--
Arsenic	10	µg/m <sup>3</sup>	ND (<0.45)	--	--	--	ND (<0.43)	ND (<0.47)	ND (<0.56)	--	--
Barium	500	µg/m <sup>3</sup>	<b>0.46</b>	--	--	--	ND (<0.43)	ND (<0.47)	ND (<0.56)	--	--
Beryllium	0.2	µg/m <sup>3</sup>	ND (<0.22)	--	--	--	ND (<0.21)	ND (<0.24)	ND (<0.28)	--	--
Cadmium	5	µg/m <sup>3</sup>	ND (<0.22)	--	--	--	<b>0.24</b>	ND (<0.24)	ND (<0.28)	--	--
Chromium (Total)	--	µg/m <sup>3</sup>	<b>5</b>	--	--	--	<b>2.2</b>	<b>5.3</b>	<b>1.2</b>	--	--
Cobalt	100	µg/m <sup>3</sup>	ND (<0.22)	--	--	--	ND (<0.21)	ND (<0.24)	ND (<0.28)	--	--
Copper	1,000	µg/m <sup>3</sup>	<b>5</b>	--	--	--	<b>1.8</b>	<b>3.9</b>	<b>0.95</b>	--	--
Lead	50	µg/m <sup>3</sup>	<b>2.4</b>	--	--	--	<b>5.8</b>	<b>2.1</b>	ND (<0.56)	--	--
Molybdenum	15,000	µg/m <sup>3</sup>	ND (<0.45)	--	--	--	ND (<0.43)	ND (<0.47)	ND (<0.56)	--	--
Nickel	1,000	µg/m <sup>3</sup>	ND (<0.45)	--	--	--	ND (<0.43)	ND (<0.47)	ND (<0.56)	--	--
Selenium	200	µg/m <sup>3</sup>	ND (<1.3)	--	--	--	ND (<1.3)	ND (<1.4)	ND (<1.7)	--	--
Silver	10	µg/m <sup>3</sup>	<b>1.1</b>	--	--	--	ND (<0.21)	<b>0.57</b>	ND (<0.28)	--	--
Thallium	100	µg/m <sup>3</sup>	ND (<1.3)	--	--	--	ND (<1.3)	ND (<1.4)	ND (<1.7)	--	--
Vanadium	500	µg/m <sup>3</sup>	ND (<0.45)	--	--	--	ND (<0.43)	ND (<0.47)	ND (<0.56)	--	--
Zinc	5,000	µg/m <sup>3</sup>	<b>130</b>	--	--	--	<b>30</b>	<b>150</b>	<b>9.7</b>	--	--
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m <sup>3</sup>	--	<b>0.24</b>	<b>0.8</b>	<b>0.34</b>	--	--	--	<b>0.49</b>	<b>0.38</b>

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-P3-101321 (Duplicate of EDC-AM-H2-101321)	EDC-AM-H3- 101321	EDC-AM-M1- 101321	EDC-AM-M2- 101321	EDC-AM-M3- 101321	EDC-AM-H1- 101421	EDC-AM-H2- 101421	EDC-AM-M1- 101421	EDC-AM-M2- 101421
Sample Date			10/13/2021	10/13/2021	10/13/2021	10/13/2021	10/13/2021	10/14/2021	10/14/2021	10/14/2021	10/14/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m³	--	--	ND (<1.4)	ND (<1.5)	ND (<1.3)	--	--	ND (<1.3)	ND (<1.4)
Arsenic	10	µg/m³	--	--	ND (<0.46)	ND (<0.5)	ND (<0.45)	--	--	ND (<0.44)	ND (<0.46)
Barium	500	µg/m³	--	--	ND (<0.46)	<b>0.68</b>	ND (<0.45)	--	--	ND (<0.44)	ND (<0.46)
Beryllium	0.2	µg/m³	--	--	ND (<0.23)	ND (<0.25)	ND (<0.22)	--	--	ND (<0.22)	ND (<0.23)
Cadmium	5	µg/m³	--	--	ND (<0.23)	ND (<0.25)	<b>1.5</b>	--	--	ND (<0.22)	<b>1.9</b>
Chromium (Total)	--	µg/m³	--	--	<b>0.92</b>	<b>5.7</b>	<b>6.2</b>	--	--	<b>1.9</b>	<b>7.4</b>
Cobalt	100	µg/m³	--	--	ND (<0.23)	ND (<0.25)	ND (<0.22)	--	--	ND (<0.22)	ND (<0.23)
Copper	1,000	µg/m³	--	--	ND (<0.46)	<b>3.1</b>	<b>3.4</b>	--	--	<b>1.1</b>	<b>4.3</b>
Lead	50	µg/m³	--	--	ND (<0.46)	<b>2.1</b>	<b>0.89</b>	--	--	<b>0.94</b>	<b>0.99</b>
Molybdenum	15,000	µg/m³	--	--	ND (<0.46)	ND (<0.5)	ND (<0.45)	--	--	<b>1.1</b>	<b>0.57</b>
Nickel	1,000	µg/m³	--	--	ND (<0.46)	ND (<0.5)	ND (<0.45)	--	--	ND (<0.44)	ND (<0.46)
Selenium	200	µg/m³	--	--	ND (<1.4)	ND (<1.5)	ND (<1.3)	--	--	ND (<1.3)	ND (<1.4)
Silver	10	µg/m³	--	--	ND (<0.23)	<b>0.51</b>	ND (<0.22)	--	--	ND (<0.22)	<b>0.69</b>
Thallium	100	µg/m³	--	--	ND (<1.4)	ND (<1.5)	ND (<1.3)	--	--	ND (<1.3)	ND (<1.4)
Vanadium	500	µg/m³	--	--	ND (<0.46)	ND (<0.5)	ND (<0.45)	--	--	ND (<0.44)	ND (<0.46)
Zinc	5,000	µg/m³	--	--	<b>3.4</b>	<b>100</b>	<b>33</b>	--	--	<b>19</b>	<b>34</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m³	<b>0.32</b>	<b>1.2</b>	--	--	--	<b>0.45</b>	<b>0.76</b>	--	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-H1- 101521	EDC-AM-H2- 101521	EDC-AM-M1- 101521	EDC-AM-M2- 101521	EDC-AM-H1- 101621	EDC-AM-H2- 101621	EDC-AM-M1- 101621	EDC-AM-M2- 101621	EDC-AM-H3- 101821	EDC-AM-M3- 101821
Sample Date			10/15/2021	10/15/2021	10/15/2021	10/15/2021	10/16/2021	10/16/2021	10/16/2021	10/16/2021	10/18/2021	10/18/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air									
Antimony	500	µg/m³	--	--	ND (<1.6)	ND (<1.7)	--	--	ND (<1.5)	ND (<1.5)	--	ND (<1.3)
Arsenic	10	µg/m³	--	--	ND (<0.54)	ND (<0.55)	--	--	ND (<0.5)	ND (<0.51)	--	ND (<0.43)
Barium	500	µg/m³	--	--	ND (<0.54)	ND (<0.55)	--	--	ND (<0.5)	ND (<0.51)	--	ND (<0.43)
Beryllium	0.2	µg/m³	--	--	ND (<0.27)	ND (<0.28)	--	--	ND (<0.25)	ND (<0.25)	--	ND (<0.21)
Cadmium	5	µg/m³	--	--	ND (<0.27)	<b>0.29</b>	--	--	ND (<0.25)	<b>0.35</b>	--	ND (<0.21)
Chromium (Total)	--	µg/m³	--	--	<b>0.74</b>	<b>2.5</b>	--	--	<b>2</b>	<b>3.5</b>	--	<b>0.97</b>
Cobalt	100	µg/m³	--	--	ND (<0.27)	ND (<0.28)	--	--	ND (<0.25)	ND (<0.25)	--	ND (<0.21)
Copper	1,000	µg/m³	--	--	ND (<0.54)	<b>0.8</b>	--	--	<b>0.74</b>	<b>2.7</b>	--	ND (<0.43)
Lead	50	µg/m³	--	--	ND (<0.54)	<b>0.9</b>	--	--	<b>0.75</b>	ND (<0.51)	--	ND (<0.43)
Molybdenum	15,000	µg/m³	--	--	ND (<0.54)	ND (<0.55)	--	--	ND (<0.5)	ND (<0.51)	--	ND (<0.43)
Nickel	1,000	µg/m³	--	--	ND (<0.54)	ND (<0.55)	--	--	ND (<0.5)	ND (<0.51)	--	ND (<0.43)
Selenium	200	µg/m³	--	--	ND (<1.6)	ND (<1.7)	--	--	ND (<1.5)	ND (<1.5)	--	ND (<1.3)
Silver	10	µg/m³	--	--	ND (<0.27)	ND (<0.28)	--	--	ND (<0.25)	ND (<0.25)	--	ND (<0.21)
Thallium	100	µg/m³	--	--	ND (<1.6)	ND (<1.7)	--	--	ND (<1.5)	ND (<1.5)	--	ND (<1.3)
Vanadium	500	µg/m³	--	--	ND (<0.54)	ND (<0.55)	--	--	ND (<0.5)	ND (<0.51)	--	ND (<0.43)
Zinc	5,000	µg/m³	--	--	<b>4.2</b>	<b>12</b>	--	--	<b>20</b>	<b>28</b>	--	<b>5.5 J</b>
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air									
Hexavalent Chromium	5	µg/m³	<b>0.27</b>	<b>0.58</b>	--	--	<b>0.27</b>	<b>0.57</b>	--	--	<b>0.21</b>	--

**Table 11**  
**Particulate Air Sampling Results**  
**E-D Coat, Inc. Time-Critical Removal Action**  
**Oakland, California**

Sample ID			EDC-AM-P3-101821 (Duplicate of EDC-AM-M3-101821)	EDC-AM-H3- 101921	EDC-AM-M3- 101921	EDC-AM-H3- 102021	EDC-AM-M3- 102021	EDC-AM-H3- 102121	EDC-AM-M3- 102121	EDC-AM-H3- 102221	EDC-AM-M3- 102221
Sample Date			10/18/2021	10/19/2021	10/19/2021	10/20/2021	10/20/2021	10/21/2021	10/21/2021	10/22/2021	10/22/2021
Analyte	OSHA PEL	Units	NIOSH Method 7303M - Air								
Antimony	500	µg/m³	ND (<1.3)	--	ND (<1.4)	--	ND (<1.3)	--	ND (<1.3)	--	ND (<1.5)
Arsenic	10	µg/m³	ND (<0.45)	--	ND (<0.48)	--	ND (<0.42)	--	ND (<0.43)	--	ND (<0.49)
Barium	500	µg/m³	ND (<0.45)	--	ND (<0.48)	--	ND (<0.42)	--	ND (<0.43)	--	ND (<0.49)
Beryllium	0.2	µg/m³	ND (<0.22)	--	ND (<0.24)	--	ND (<0.21)	--	ND (<0.21)	--	ND (<0.24)
Cadmium	5	µg/m³	ND (<0.22)	--	<b>0.44</b>	--	<b>0.48</b>	--	ND (<0.21)	--	ND (<0.24)
Chromium (Total)	--	µg/m³	<b>1.1</b>	--	<b>6.1</b>	--	<b>3.7</b>	--	<b>1.2</b>	--	<b>0.55</b>
Cobalt	100	µg/m³	ND (<0.22)	--	ND (<0.24)	--	ND (<0.21)	--	ND (<0.21)	--	ND (<0.24)
Copper	1,000	µg/m³	ND (<0.45)	--	<b>1.9</b>	--	<b>2.8</b>	--	<b>0.67</b>	--	ND (<0.49)
Lead	50	µg/m³	ND (<0.45)	--	<b>0.66</b>	--	ND (<0.42)	--	ND (<0.43)	--	ND (<0.49)
Molybdenum	15,000	µg/m³	ND (<0.45)	--	<b>0.65</b>	--	ND (<0.42)	--	ND (<0.43)	--	ND (<0.49)
Nickel	1,000	µg/m³	ND (<0.45)	--	ND (<0.48)	--	ND (<0.42)	--	ND (<0.43)	--	ND (<0.49)
Selenium	200	µg/m³	ND (<1.3)	--	ND (<1.4)	--	ND (<1.3)	--	ND (<1.3)	--	ND (<1.5)
Silver	10	µg/m³	ND (<0.22)	--	ND (<0.24)	--	ND (<0.21)	--	ND (<0.21)	--	ND (<0.24)
Thallium	100	µg/m³	ND (<1.3)	--	ND (<1.4)	--	ND (<1.3)	--	ND (<1.3)	--	ND (<1.5)
Vanadium	500	µg/m³	ND (<0.45)	--	ND (<0.48)	--	ND (<0.42)	--	ND (<0.43)	--	ND (<0.49)
Zinc	5,000	µg/m³	<b>8.4 J</b>	--	<b>19</b>	--	<b>15</b>	--	<b>3.9</b>	--	ND (<2.4)
Analyte	OSHA PEL	Units	NIOSH Method 7605M - Air								
Hexavalent Chromium	5	µg/m³	--	<b>1.1</b>	--	<b>0.43</b>	--	<b>0.3</b>	--	<b>0.18</b>	--

Notes:

-- = Not applicable

Particulate Metals in Air by NIOSH Method 7303M and 7605M

**Bold** = Detected above reporting limit

**Bold, Underlined and Highlighted** = Analytical result exceeds screening levels

µg/m³ = Micrograms per cubic meter

ID = Identification

ND = Not detected above the reporting limit (<RL)

NIOSH = National Institute for Occupational Safety and Health

OSHA PEL = Occupational Safety and Health Administration Permissible Exposure Limit

J = Indicates that the concentration is an approximate value because the analyte concentration is below the reporting limit and above the method detection limit